

| | |
|------------|---|
| Author(s) | Monroe, James D. |
| Title | Deception: Theory and Practice |
| Publisher | Monterey, California. Naval Postgraduate School |
| Issue Date | 2012-06 |
| URL | http://hdl.handle.net/10945/7388 |

This document was downloaded on March 21, 2014 at 14:27:51



<http://www.nps.edu/library>

Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

**Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943**



<http://www.nps.edu/>



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

DECEPTION: THEORY AND PRACTICE

by

James D. Monroe

June 2012

Thesis Advisor:
Second Reader:

Hy Rothstein
Kalev Sepp

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

| | | | | |
|---|---|--|--|--|
| REPORT DOCUMENTATION PAGE | | | <i>Form Approved OMB No. 0704-0188</i> | |
| Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503. | | | | |
| 1. AGENCY USE ONLY (Leave blank) | | 2. REPORT DATE June 2012 | 3. REPORT TYPE AND DATES COVERED Master's Thesis | |
| 4. TITLE AND SUBTITLE Deception: Theory and Practice | | | 5. FUNDING NUMBERS | |
| 6. AUTHOR(S) James D. Monroe | | | | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000 | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A | | | 10. SPONSORING/MONITORING AGENCY REPORT NUMBER | |
| 11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number _____N/A_____. | | | | |
| 12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited | | | 12b. DISTRIBUTION CODE A | |
| 13. ABSTRACT (maximum 200 words) This thesis explores the history of U.S. Army deception and doctrine, and combines the insights gained with the various works on deception, cognitive psychology, communications, and decision-making in order to distill a concise handbook for deception practitioners. A longitudinal review of U.S. Army doctrine reveals a wide variation in the treatment of deception, from emphasized to ignored. This variation can be primarily explained by the U.S. preference for the cumulative destruction style of war and the perceived balance of power between the U.S. and its adversaries. This thesis strives to fill the current doctrinal gap by distilling the existing body of work to create a theory of deception in the military context. The theory presented provides a cogent structure, taxonomy, and lexicon; as well as, emphasis on how deception functions within the frameworks of communications and decision-making. Next, a synthesis of the practice of deception is presented, with a focus on deception planning and the essential elements of deception practice. Examples of U.S. use of deception from the Revolutionary War to Operation DESERT STORM are presented to provide illumination on the utility and use of deception. Finally, the thesis provides recommendations on how to organize for deception operations. | | | | |
| 14. SUBJECT TERMS Military Deception, Communications, Decision-Making, OODA, Doctrine, Planning | | | 15. NUMBER OF PAGES 173 | |
| | | | 16. PRICE CODE | |
| 17. SECURITY CLASSIFICATION OF REPORT Unclassified | 18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified | 19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified | 20. LIMITATION OF ABSTRACT UU | |

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

DECEPTION: THEORY AND PRACTICE

James D. Monroe
Master Sergeant, United States Army
B.A., Thomas Edison State College, 2004

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS

from the

**NAVAL POSTGRADUATE SCHOOL
June 2012**

Author: James D. Monroe

Approved by: Dr. Hy Rothstein
Thesis Advisor

Dr. Kalev Sepp
Second Reader

Dr. John Arquilla
Chair, Department of Defense Analysis

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

This thesis explores the history of U.S. Army deception and doctrine, and combines the insights gained with the various works on deception, cognitive psychology, communications, and decision-making in order to distill a concise handbook for deception practitioners. A longitudinal review of U.S. Army doctrine reveals a wide variation in the treatment of deception, from emphasized to ignored. This variation can be primarily explained by the U.S. preference for the cumulative destruction style of war and the perceived balance of power between the U.S. and its adversaries. This thesis strives to fill the current doctrinal gap by distilling the existing body of work to create a theory of deception in the military context. The theory presented provides a cogent structure, taxonomy, and lexicon; as well as, emphasis on how deception functions within the frameworks of communications and decision-making. Next, a synthesis of the practice of deception is presented, with a focus on deception planning and the essential elements of deception practice. Examples of U.S. use of deception from the Revolutionary War to Operation DESERT STORM are presented to provide illumination on the utility and use of deception. Finally, the thesis provides recommendations on how to organize for deception operations.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

| | | |
|-------------|--|-----------|
| I. | INTRODUCTION..... | 1 |
| A. | BACKGROUND | 1 |
| B. | HYPOTHESES | 3 |
| C. | SCOPE AND SIGNIFICANCE | 3 |
| D. | METHODOLOGY | 4 |
| II. | DECEPTION IN U.S. ARMY DOCTRINE | 7 |
| A. | PRE-WORLD WAR II ERA | 8 |
| B. | WORLD WAR II ERA..... | 10 |
| C. | POST WORLD WAR II THROUGH VIETNAM | 13 |
| D. | POST VIETNAM ERA THROUGH DESERT STORM..... | 18 |
| E. | POST COLD WAR ERA | 21 |
| F. | CONCLUSIONS OF DOCTRINE REVIEW | 24 |
| III. | EXPLANATIONS FOR VARIATION OF DECEPTION EMPHASIS..... | 25 |
| A. | THE AMERICAN WAY OF WAR..... | 25 |
| 1. | Styles of War | 26 |
| 2. | American Preference for Cumulative Destruction | 29 |
| 3. | Balance of Power | 31 |
| B. | PROFESSIONAL OFFICER CLASS | 34 |
| C. | OVER-CLASSIFICATION | 35 |
| D. | MORALITY | 36 |
| E. | CONCLUSION | 37 |
| IV. | THEORY OF DECEPTION..... | 39 |
| A. | WHAT IS DECEPTION | 39 |
| 1. | Deception Defined | 40 |
| 2. | Deception: Truth and Lies | 41 |
| B. | TAXONOMY OF DECEPTION | 43 |
| 1. | Taxonomy of Method..... | 43 |
| 2. | Deception | 44 |
| 3. | Active Deception..... | 45 |
| a. | <i>Displays.....</i> | 45 |
| b. | <i>Feints</i> | 47 |
| c. | <i>Demonstrations</i> | 47 |
| d. | <i>Disinformation</i> | 48 |
| 4. | Cover | 49 |
| a. | <i>Camouflage</i> | 49 |
| b. | <i>Denial</i> | 50 |
| 5. | Alternate Deception Taxonomies..... | 50 |
| a. | <i>Commission and Omission</i> | 50 |
| b. | <i>Level of Sophistication.....</i> | 51 |
| c. | <i>Effect-Based</i> | 52 |
| C. | DECEPTION AND UNCERTAINTY | 52 |

| | | |
|----|---|----|
| | 1. Uncertainty | 52 |
| | 2. A-Type Deception..... | 53 |
| | 3. M-Type Deception..... | 54 |
| D. | THE WHY OF DECEPTION..... | 54 |
| | 1. Overview | 54 |
| | 2. Surprise..... | 55 |
| | 3. Freedom of Action..... | 55 |
| | 4. Save Lives and Resources..... | 56 |
| | 5. Mislead the Target | 56 |
| | 6. Relative Superiority | 57 |
| | 7. Security | 58 |
| | 8. Subversion | 58 |
| | 9. Mental Isolation | 59 |
| E. | COMMUNICATIONS PROCESS OF DECEPTION..... | 60 |
| | 1. Overview of Communications..... | 60 |
| | 2. Indicators..... | 61 |
| | 3. Channels..... | 62 |
| | 4. Deception's Role in the Communications Process | 63 |
| F. | DECEPTION AND TARGET DECISION-MAKING..... | 63 |
| | 1. Observe | 65 |
| | 2. Orient | 66 |
| | a. <i>Cultural Schemata</i> | 67 |
| | b. <i>Personal Schemata</i> | 68 |
| | c. <i>Cognitive Biases and Heuristics</i> | 69 |
| | d. <i>Results of Orientation</i> | 71 |
| | 3. Decide | 71 |
| | 4. Act..... | 72 |
| G. | DECEPTION PROCESS | 72 |
| | 1. Bell and Whaley | 72 |
| | 2. See-Think-Do..... | 74 |
| | 3. Revised Deception Process | 74 |
| V. | PRACTICE OF MILITARY DECEPTION | 77 |
| A. | DECEPTION PLANNING PROCESS | 79 |
| | 1. Mission Analysis..... | 79 |
| | a. <i>Information Requirements</i> | 79 |
| | 2. Planning Guidance..... | 82 |
| | 3. Planning Methodology..... | 83 |
| | a. <i>DO</i> | 83 |
| | b. <i>THINK</i> | 84 |
| | c. <i>SEE</i> | 84 |
| | 4. Deception Means | 85 |
| | a. <i>Physical</i> | 85 |
| | b. <i>Cyber Electromagnetic</i> | 86 |
| | c. <i>Administrative</i> | 87 |
| | 5. Execution and Assessment | 88 |

| | | | |
|-----|----|---|-----|
| | a. | <i>Execution</i> | 88 |
| | b. | <i>Assessment</i> | 89 |
| | 6. | Termination | 90 |
| B. | | PRINCIPLES OF DECEPTION | 91 |
| | 1. | Know the Target and Exploit Existing Perceptions..... | 93 |
| | a. | <i>Understand the Target</i> | 93 |
| | b. | <i>Exploit Existing Perceptions</i> | 93 |
| | c. | <i>Avoiding Windfalls</i> | 94 |
| | 2. | Security is Paramount | 95 |
| | 3. | Utilize Flexibility, Variety, and Conditioning | 96 |
| | a. | <i>Flexibility</i> | 96 |
| | b. | <i>Variety</i> | 96 |
| | c. | <i>Conditioning</i> | 97 |
| | 4. | Coordination and Control..... | 98 |
| | a. | <i>Control</i> | 98 |
| | b. | <i>Coordination</i> | 98 |
| | 5. | Requirement for Target Action | 99 |
| | 6. | Preparation and Timing | 99 |
| | 7. | Beware Unintended Consequences..... | 100 |
| C. | | DECEPTION IN SUPPORT OF IRREGULAR OPERATIONS | 101 |
| | 1. | Unconventional Warfare | 101 |
| | 2. | Counterinsurgency/Foreign Internal Defense..... | 103 |
| | 3. | Stability Operations / Humanitarian Assistance Operations | 104 |
| | 4. | Counterterrorism..... | 105 |
| | 5. | Cyberwarfare | 106 |
| D. | | MILITARY DECEPTION FAILURES..... | 106 |
| VI. | | HISTORIC U.S. ARMY USE OF DECEPTION..... | 109 |
| | A. | REVOLUTIONARY WAR – BATTLE OF TRENTON | 109 |
| | B. | CIVIL WAR | 110 |
| | 1. | Peninsula Campaign | 110 |
| | 2. | Capture of Atlanta | 111 |
| | 3. | Athens, Alabama | 112 |
| | C. | PHILIPPINE INSURRECTION – RAID ON PALANAN | 113 |
| | D. | WORLD WAR I – SAINT MIHIEL | 115 |
| | E. | DECEPTION IN WORLD WAR II..... | 117 |
| | 1. | Operation FORTITUDE SOUTH | 117 |
| | 2. | 23rd Headquarters Special Troops | 119 |
| | 3. | Operation WEDLOCK | 120 |
| | F. | KOREAN WAR – INCHON LANDING | 122 |
| | G. | VIETNAM WAR | 124 |
| | 1. | MACVSOG | 124 |
| | a. | <i>Sacred Sword Patriots League</i> | 124 |
| | b. | <i>Deception in Support of Security</i> | 126 |
| | 2. | MACV | 127 |
| | H. | OPERATION DESERT STORM..... | 129 |

| | | |
|-------------|---|------------|
| VII. | CONCLUSIONS AND RECOMMENDATIONS..... | 133 |
| A. | CONCLUSION | 133 |
| B. | RECOMMENDATIONS..... | 134 |
| | 1. Doctrine..... | 135 |
| | 2. Leadership, Education, and Training | 136 |
| | 3. Personnel Selection | 138 |
| | 4. Facilities | 139 |
| C. | FINAL NOTE..... | 139 |
| | LIST OF REFERENCES..... | 141 |
| | INITIAL DISTRIBUTION LIST | 153 |

LIST OF FIGURES

| | | |
|------------|---|----|
| Figure 1. | Timeline of Deception-Related Doctrine and Deception Proponents from 1905–2011..... | 8 |
| Figure 2. | Comparison of Balance of Power and Doctrinal Emphasis of Deception | 32 |
| Figure 3. | Daniel and Herbig’s “Deception’s Subsidiary Concepts.” (From:)..... | 42 |
| Figure 4. | Interrelationship of Truth, Deception, and Lies..... | 43 |
| Figure 5. | Taxonomy of Deception | 44 |
| Figure 6. | Communications Cycle | 61 |
| Figure 7. | Expanded OODA Process (From:) | 65 |
| Figure 8. | Bell and Whaley’s Deception Planning Loop (From:) | 73 |
| Figure 9. | Example of Bell and Whaley’s Deception Planning Process in Action (From:) | 73 |
| Figure 10. | Revised Deception Process | 76 |

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

| | | |
|-----------|---|-----|
| Table 1. | Characteristics of Cumulative Destruction and Systemic Disruption..... | 27 |
| Table 2. | Chisholm and Feehan's Eight Ways to Deceive..... | 51 |
| Table 3. | Examples of Target Responses to Deception..... | 57 |
| Table 4. | Examples of Channels..... | 63 |
| Table 5. | Sample Deception Planning Resources | 81 |
| Table 6. | Notional Execution Matrix Based on Events of Operation DESERT STORM.... | 88 |
| Table 7. | Potential Termination Triggers | 91 |
| Table 8. | Deception Fundamentals, Principles, and Maxims..... | 92 |
| Table 9. | Deception Analysis of Battle of Trenton | 110 |
| Table 10. | Deception Analysis of Peninsula Campaign..... | 111 |
| Table 11. | Deception Analysis of Atlanta..... | 112 |
| Table 12. | Deception Analysis of Athens, Georgia..... | 113 |
| Table 13. | Deception Analysis of Raid on Palanan..... | 115 |
| Table 14. | Deception Analysis of Saint Mihiel..... | 116 |
| Table 15. | Deception Analysis of Operation FORTITUDE SOUTH..... | 118 |
| Table 16. | Deception Analysis of Operation KODAK..... | 120 |
| Table 17. | Deception Analysis of Operation WEDLOCK | 122 |
| Table 18. | Deception Analysis of Operation CHROMITE..... | 123 |
| Table 19. | Deception Analysis of SSPL | 126 |
| Table 20. | Deception Analysis of MACVSOG Security | 127 |
| Table 21. | Deception Analysis of DIAMOND I..... | 128 |
| Table 22. | Deception Analysis of Ranger Assault | 128 |
| Table 23. | Deception Analysis of Operation DESERT STORM | 131 |
| Table 24. | Recommended Personnel for Formal Deception Education..... | 137 |

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---------|--|
| APD | Army Doctrine Publication |
| ADRP | Army Doctrine Reference Publication |
| ARVN | Army of the Republic of Vietnam |
| ATTP | Army, Tactics, Techniques, and Procedures |
| C&D | Cover and Deception |
| CCD | Camouflage, Concealment, and Decoys (Army) |
| CCD | Camouflage, Concealment, and Deception (Joint) |
| D&D | Denial and Deception |
| DOTLMPF | Doctrine, Organization, Training, Leadership, Materials, Personnel, and Facilities |
| EEFI | Essential Elements of Friendly Information |
| FM | Field Manual |
| HUMINT | Human Intelligence |
| ICD | Imitative Communication Deception |
| IDF | Israeli Defense Forces |
| JOPEs | Joint Operations Planning and Execution System |
| JP | Joint Publication |
| JSC | Joint Security Control |
| MACV | Military Assistance Command – Vietnam |
| MACVSOG | Military Assistance Command – Vietnam Studies and Observation Group |
| MD | Military Deception |
| MDMP | Military Decision Making Process |
| MED | Manipulative Electronic Deception |
| MISO | Military Information Support Operations |

| | |
|--------|---|
| NCOIC | Non-commissioned Officer in Charge |
| NKPA | North Korean People's Army |
| NVA | North Vietnamese Army |
| OIC | Officer in Charge |
| OODA | Observe-Orient-Decide-Act |
| SOP | Standard Operating Procedures |
| TC | Training Circular |
| UNIFIL | United Nations Interim Force in Lebanon |
| VC | Viet Cong |

ACKNOWLEDGMENTS

I would like to thank the faculty and staff of the Defense Analysis Department for providing this amazing experience. I am humbled by the collective knowledge and experience in this department. I would also like to thank Dr. Hy Rothstein and Dr. Kalev Sepp for their invaluable mentorship and advice, without which I would not have been able to complete this thesis. Thanks also to Zooey Lober and the rest of the hard-working and patient personnel at the Dudley Knox Library Interlibrary Loan desk for their tireless efforts in finding my esoteric, and often quixotic, requests. Additionally, I thank the myriad organizations who responded to my plaintive information requests, especially the folks at the United States Army Military History Institute. To my fellow students, thanks for the prodding and cajoling to tackle this topic, and for the opportunity to interact and learn from you. Finally, I have to thank my lovely wife, Christy, whose patient support and faith, both in this endeavor and my career, have been invaluable.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

For where the lion's skin will not reach, you must patch it out with the fox's.

– Lysander the Spartan¹

During the opening phases of the 2006 Israeli-Hezbollah War, Israeli Defense Forces (IDF) hammered the network of Hezbollah bunkers along the Lebanese border. Hezbollah had been building the bunker network for years, under the watchful eyes of IDF surveillance, Lebanese spies working for Israel, and the United Nations Interim Force in Lebanon (UNIFIL), patrolled the southern Lebanese border. What the IDF did not realize until far too late was the network of bunkers so diligently—and visibly—emplaced by Hezbollah were decoys; Hezbollah's true bunkers were scattered across the countryside and covered by layers of security and camouflage. The bunker deception was but one of several cunning stratagems used by Hezbollah to blunt the IDF's technological and information advantages, allowing Hezbollah to maintain combat effectiveness in the face of the Israeli assault. Deception had once more proven its worth.²

A. BACKGROUND

Stratagems are essential in war, as commanders seek to hide their real intentions, capabilities, and actions from the enemy, while cunningly showing false intentions capabilities and actions to lure the enemy into defeat. From the earliest battles of antiquity, commanders have used guile and misdirection for tactical, operational, and strategic effect. Hannibal at Cannae, the Greeks' use of the Trojan Horse, and Gideon's raid on the Midianites are but a few examples of successful deception in the ancient world. Operations OVERLORD and BARBAROSA during WWII, British pseudo-operations

¹ Plutarch, John Dryden and Arthur Hugh Clough, *Plutarch's Lives*, Modern Library paperback ed., Vol. 1 (New York: Modern Library, 2001), 588.

² David A. Acosta, "The Makara of Hizballah: Deception in the 2006 Summer War" (Master's thesis, Naval Postgraduate School), 43 – 45, accessed 15 January 2012, <http://handle.dtic.mil/100.2/ADA469918>.

during the Mau-Mau insurgency in Kenya, and Hezbollah's use of deception against Israel during the 2006 war demonstrate the continuing utility of deception in the modern era.

Even within the more limited scope of U.S. Army history, deception has played an important role. General Washington utilized numerous stratagems to great effect during the Revolutionary war, including deceiving the British about the status of his forces at Valley Forge to deter attack, and later about his intentions to attack New York, setting the stage for the final showdown at Yorktown. During the Civil War, Confederate General Magruder used decoy cannons made of nothing more than painted tree trunks to hold Union forces in check for months after the First Battle of Manassas. General Pershing deceived the Germans about his intentions in order to gain surprise for the assault on the St. Michel salient during World War I.³ U.S. use of deception reached a plateau during World War II. After a slow start, the U.S. Army became adept at using deception and by 1947 Chief of Staff of the Army, General Eisenhower [in a 1947 memo to the Lauris Norstad, Director, Plans and Operations Division] stated:

...no major operations should be undertaken without planning and executing appropriate deception measures. As time goes on... there is a danger that these two means [psychological warfare and cover and deception] may in the future not be considered adequately in our planning. I consider it essential that the War Department should continue to take those steps that are necessary to keep alive the arts of... cover and deception and that there should continue in being a nucleus of personnel capable in handling these arts in case an emergency arises. I desire therefore that the Director of Plans and Operations maintain the potential effectiveness of these arts in order that their benefits may become immediately available, as and when desired, in furtherance of national security.⁴

During Vietnam, the Military Assistance Command Vietnam—Studies and Observation Group [MACVSOG] made extensive use of deception in its operations against

³ Richard Baker, "The Lost and found Art of Deception" (Paper presented at the Conference of Army Historians, Arlington, Virginia, 25 – 28 July 2011).

⁴ Dwight D. Eisenhower, *The Papers of Dwight David Eisenhower: The Chief of Staff*, ed. Louis Galambos, Vol. VIII (Baltimore: Johns Hopkins Press, 1978), 1763.

North Vietnam. During Operation DESERT STORM, U.S. forces deceived Saddam's forces into believing the assault into Kuwait would come from the sea, and not from the now famous "left hook."

In spite of the demonstrated utility of deception in support U.S. military operations, the U.S. Army currently falls short on the requirement to provide practitioners of deception with a solid doctrinal foundation in the theory and practice of deception. Instead, the U.S. Army has for the most part of two decades done little more than pay lip service to the importance of deception, or in the case of camouflage and concealment, stripped the concepts of their deception lineage. The last dedicated deception manual was published in 1988, and is no longer available through official channels. Furthermore, the 1957 and 1967 editions of the deception field manual have effectively disappeared.⁵ Current U.S. Army doctrine, discounting uses of the word "deception" as a buzzword, is limited to a 30-page section in the information operations field manual that completely ignores essential tenets of deception like perceptual and cognitive biases. There is a need for a concise distillation of theory and practice for the military practitioners of deception.

B. HYPOTHESES

The degree of emphasis of deception in U.S. Army doctrine is primarily related to the perceived balance of power between the United States and potential adversaries.

There are essential tenets of the theory and practice of deception that can be drawn from the existing bodies of work.

C. SCOPE AND SIGNIFICANCE

What the literature review shows is there is a definite lack of guidance on the theory and practice of deception within current U.S. Army doctrine, despite a continuing theme in the doctrine that deception is of utility to operations. On the civilian side, there is a diversity of ideas on the theory and practice of deception; however, these ideas are

⁵ The author's quest to find these manuals has included contacting each service academy and war college, all the proponents for deception; as well as, the U.S. Army Military History Institute, and the National Archives. These requests were in addition to the tireless and patient work of the Dudley Knox Library Staff. The vanishing of *FM 31-40* is indicative of the U.S. Army's habit of purging "obsolete" doctrine; a habit that perhaps merits its own thesis on the value of institutional knowledge.

dispersed over a large body of work. What is lacking in the civilian literature is an equivalent to the Grand Unification Theory in Physics, one work that distills the breadth and depth of the deception field into a usable synthesis. While not being so presumptuous as to present a Grand Unification Theory of deception, this thesis will bridge the gap in U.S. Army doctrine by creating a petite military deception focused synthesis of the body of deception work. This work is not intended to be proscriptive or all-inclusive; rather, the goal of the work is to provide commanders and practitioners a framework of concepts and ideas which can be altered to fit their organizational and operational needs. Central to this thesis is a reunification of cover with deception, as cover and active deception are mutually supporting concepts. The creation of an unclassified deception handbook will fill a doctrinal void and hopefully increase the perceived utility of deception within the force.

D. METHODOLOGY

The purpose of this thesis is to explore the breadth of U.S. Army military deception history and doctrine, and combine the insights gained with the various works on deception theory and practice, cognitive psychology, communications, and decision-making in order to distill the theory and practice of deception into a concise handbook for deception practitioners. Rather than attempting to cover the entirety of deceptive practices, the scope of this thesis is deception as employed in support of military objectives.

In order to achieve this goal, the thesis first constructs a longitudinal review of U.S. Army doctrine focusing on the capstone operations manual series and deception related manuals in order to discern whether there is a pattern to U.S. Army doctrine's treatment of deception. The scope of this survey is from the 1905 *Field Service Regulations* through the 2012 *ADP 3-0*. Next the thesis examines the reasons commonly given for why deception is marginalized within military affairs. This examination is conducted through the lenses of doctrine and practice.

Then the thesis shifts to a distillation of the existing body work on deception to create a theory of deception in the military context. Within the theory of deception

chapter the focus will be on providing a cogent structure, taxonomy, and lexicon for deception with an emphasis on how deception works. The structure provided by Bell and Whaley's general theory of deception will be used as the initial framework. To the framework is added an understanding of the role of perceptual and cognitive biases in deception; a fleshed out lexicon of deception related terms; and a broad set of categories for deception techniques. This requires taking the mélange of existing works on deception and rendering the concepts down to a cohesive synthesis.

After deception theory, the thesis presents a synthesis of the practice of deception. The practice of deception chapter first presents a planning process that builds upon the planning process presented in *JP 3-13.4: Military Deception*. Next, the chapter reviews the various maxims, principles, and considerations presented by deception theorists and practitioners to draw out the essential elements of deception practice. Additionally, the chapter examines the uses of deception in war illuminated with examples from history. The practice chapter ends with a discussion of deception failures in order to reinforce the necessity of proper planning and execution.

A chapter surveying U.S. military use of deception from the Revolutionary War to Operation DESERT STORM follows the practice chapter in order to provide additional illumination in the context of historic U.S. operations. This chapter serves a secondary purpose of priming the mind of the reader by demonstrating the U.S. military has a long and storied history of using deception. Finally, a conclusions chapter provides recommendations on how to organize for deception operations, with ideas on manning, training, integration in the staff, and special resource requirements.

THIS PAGE LEFT INTENTIONALLY BLANK

II. DECEPTION IN U.S. ARMY DOCTRINE

Deception is common sense soldiering.

– General Carl E. Vuono⁶

According to *FM 1, The Army*, “Doctrine is the concise expression of how Army forces contribute to campaigns, major operations, battles, and engagements.”⁷ Furthermore, doctrine creates a shared culture for the force; standardizes operations; and provides a common frame of reference.⁸ Thus any attempt to understand the role of deception within the U.S. Army must begin with an examination of U.S. Army doctrine. The U.S. Army has two capstone manuals that serve as the doctrinal foundations of the force; currently, these manuals are: *FM 1: the Army* and *APD 3-0: Unified Land Operations*.⁹ *FM 1* serves as a broad overview of the U.S. Army’s “fundamental purpose, roles, responsibilities, and functions, as established by the Constitution, Congress, and the Department of Defense.”¹⁰ *APD 3-0* serves as the “overarching doctrinal guidance and direction for conducting operations.”¹¹ In addition to these capstone documents, it is necessary to examine other doctrine publications directly related to the various aspects of deception. Each of these manuals in its various incarnations over time plays a vital role in setting the conditions for the role, or lack of a role, of deception in U.S. Army operations.

The adjectives best describing the U.S. Army’s historical and present guidance on deception are haphazard and shallow. Within the operations field manuals are statements to “use deception” sprinkled about almost as an afterthought. Only rarely are any statements approaching the strength of General Eisenhower’s about the essential

⁶ Quoted in Center for Army Lessons Learned, *CALL Bulletin 3-88: Deception* (Fort Leavenworth, KS: Combined Arms Training Activity, 1988), 3.

⁷ Headquarters, Department of the Army, *Field Manual 1: The Army*, 2005 (Washington, DC: Department of the Army, 2005), 1-20.

⁸ Headquarters, Department of the Army, *Field Manual 1: The Army*, 2005, 1-20 to 1-21.

⁹ Each of these manuals has undergone name and nomenclature changes over their history.

¹⁰ Headquarters, Department of the Army, *Field Manual 100-1: The Army* (Washington, DC: Department of the Army, 1994), v.

¹¹ Headquarters, Department of the Army, *Army Doctrine Publication 3-0: Unified Land Operations* (Washington, DC: Department of the Army, 2011), ii.

importance of deceptions in every operation. Discussion of how deception works is either missing or disregarded. For example, in *FM 3-13*, the section on exploiting target biases states that the target's biases can be “the most powerful weapon in the MD [military deception] planner's arsenal;” however the very next sentence obliterates the importance of the target's biases with “However, such information is not essential to preparing a viable MD plan.”¹²

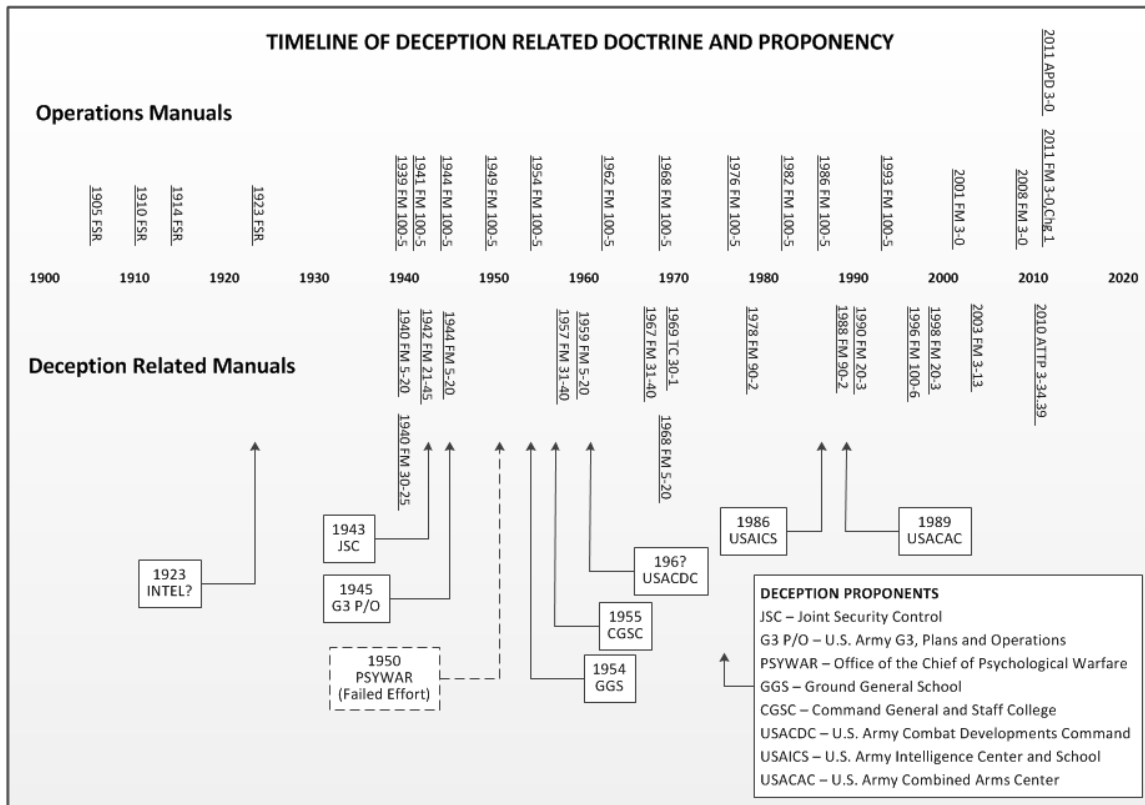


Figure 1. Timeline of Deception-Related Doctrine and Deception Proponents from 1905–2011

A. PRE-WORLD WAR II ERA

Discussion of the concept of deception in U.S. military doctrine prior to the World War II era was minimal, and when present often negative. The 1905 edition of the War Department's *Field Service Regulations* admonishes there will be no quarter

¹² Headquarters, Department of the Army, *Field Manual 3-13: Information Operations: Doctrine, Tactics, Techniques, and Procedures* (Department of the Army, 2003), 4-9.

expected for troops utilizing the enemy's uniform for "treacherous advantage," and advised commanders forced to use pieces of the enemy's uniform in extremis to maintain sufficient difference from the enemy's ensemble so as to avoid the charge of willful deception.¹³ Where concealment is discussed, it is almost purely in association with force protection, with only one mention of concealing trench works in the defense to set the stage for an "ambuscade."¹⁴ The 1910 edition eliminates much of the discussion on perfidy and wrongful deception, and increases the mentions of surprise and concealment. However, discussion of deceiving the enemy is limited to cryptic comments like: "If it is desirable to annoy or deceive the enemy, the supreme commander gives the necessary orders."¹⁵ In the 1914 edition of *Field Service Regulations* the main discussion of surprise is in the context of an imperative to not be surprised.¹⁶ While the term deception is not used in the manual, deceiving the enemy is given as a primary purpose for holding attacks.¹⁷ Amusingly, the other major reference on the topic of deception occurs in the guidance on war correspondents.¹⁸

The 1923 edition breaks from the preceding editions, representing the hard learned lessons of World War I. The manual introduces the concept of counterinformation, that is, the measures designed to prevent the adversary from gaining information on friendly capabilities, dispositions, and plans. Counterinformation effectively constitutes the deception principle of hiding the real. Of particular note is the value placed on camouflage throughout the manual. In addition to efforts to deny information, counterinformation is supported by means designed to mislead or deceive

¹³ War Department, *Field Service Regulations, United States Army. 1905, with Amendments to 1908* (Washington, DC: Government Printing Office, 1908), 200; This is possibly a reaction to the backlash against Colonel Funston's use of enemy uniforms during the Philippine Insurrection.

¹⁴ War Department, *Field Service Regulations. 1905*, 102.

¹⁵ War Department, *Field Service Regulations, United States Army. 1910* (Washington, DC: Government Printing Office, 1910), 76.

¹⁶ War Department, *Field Service Regulations, United States Army. 1914* (New York, NY: Government Printing Office, 1914), 80.

¹⁷ War Department, *Field Service Regulations. 1914*, 84 – 85.

¹⁸ War Department, *Field Service Regulations. 1914*, 168.

the enemy.¹⁹ In a complete reversal from the 1914 manual, surprise is now presented as vital to all combat actions, with feints and demonstrations presented as ways of gaining surprise.²⁰ Furthermore, surprise and deception are considered essential to the successful execution certain operations, e.g., river crossings.²¹ While still insignificant in the context of the entirety of the manual, the inclusion of deception concepts indicates some lessons learned during World War I, such as General Pershing's use of deception during the offensive against the Saint Mihiel salient, were taken to heart.²²

B. WORLD WAR II ERA

The intriguing anomaly in U.S. military doctrine prior to and during the World War II era is the presence of the concept of deception. Though cursory, the inclusion of both the covering and deceiving aspects of deception within U.S. doctrine runs counter to the prevailing conventional wisdom that the U.S. military was a deception neophyte until the capability was nurtured under the tutelage of its British counterparts. Building on the 1923 *Field Service Regulations*, the 1939 operations manual, now *FM 100-5: Tentative Field Service Regulations: Operations*, establishes deception's role in support of surprise, stating: "The effect of surprise is dependent on... the effectiveness of the means employed to deceive the enemy of our own dispositions and intentions."²³ The cover aspect of deception remains incorporated in the section on counterinformation, or "...measures taken to prevent the enemy from gaining information relative to our dispositions, movements, and plans."²⁴ Additionally, active deception becomes more strongly tied to counterinformation, with the manual stating: "Counterinformation is supplemented by positive measures designed to deceive or mislead the enemy as to our dispositions and intentions;" however, while counterinformation is provided a page and a

¹⁹ War Department, *Field Service Regulations, United States Army. 1923* (Washington, DC: Government Printing Office, 1924).

²⁰ War Department, *Field Service Regulations. 1923*, 77.

²¹ War Department, *Field Service Regulations. 1923*, 118.

²² See Chapter VI for further discussion of the Saint Mihiel deception operation.

²³ War Department, *Field Manual 100-5: Tentative Field Service Regulations of Operations, 1939* (Washington, DC: Government Printing Office, 1939), 28 – 29.

²⁴ War Department, *Field Manual 100-5: Tentative Field Service Regulations*, 41.

half, the “positive measures” are not described in any detail.²⁵ Interestingly, within the types of operations, deception—again without detail—is only mentioned in the section on guerrilla warfare, as if this is the only appropriate time. Here, the manual states:

The *attack* [emphasis in original] on the enemy is made by surprise obtained by deception and ambush.... By feint and demonstration... by spreading false information, the attacker attempts to mislead the enemy....²⁶

In the 1941 edition, now *FM 100-5: Field Service Regulations*, the term counterinformation is replaced by counterintelligence. The set of tasks bundled under the aegis of counterintelligence includes: counterespionage, cover, measures designed to deceive the enemy, counterpropaganda, and censorship.²⁷ Thus active deception completes the integration into counterintelligence started in preceding editions. The counterintelligence section includes three paragraphs on active deception, and includes a prompt designed to spur the egos of commanders: “A commander who is ingenious and resourceful in the use of tactical stratagems [*sic*] and ruses often will find methods of deceiving or misleading the enemy and of concealing his own intentions.”²⁸ Of note is the inclusion of several examples of deception techniques: e.g., feints, demonstrations, fake concentrations, and dummies. However, the section also includes a combined warning and constraint that since deception creates the danger of misleading one’s own forces: “Such measures may be adopted only by the theater commander or by his authority.”²⁹ Throughout the manual, deception is integrated into discussions on the various types of operations; such as, the use of simulated activities by screening forces to facilitate a retrograde maneuver, and the use of feints during mountain operations.³⁰ Despite the incorporation of deception across the manual, there are two notable

²⁵ War Department, *Field Manual 100-5: Tentative Field Service Regulations*, 42.

²⁶ War Department, *Field Manual 100-5: Tentative Field Service Regulations*, 1939, 228 – 229.

²⁷ War Department, *Field Manual 100-5: Field Service Regulations of Operations*, 1941 (Washington, DC: Government Printing Office, 1941), 57.

²⁸ War Department, *Field Manual 100-5: Field Service Regulations*, 1941, 58.

²⁹ War Department, *Field Manual 100-5: Field Service Regulations*, 1941, 58.

³⁰ For deception in support of the retrograde, see War Department, *Field Manual 100-5: Field Service Regulations*, 1941, 169. For deception in support of mountain operations, see page 220.

inconsistencies. First in a curious change from the 1939 manual, the section on partisan warfare, which replaces the 1939 section on guerrilla warfare, is devoid of deception. Second, in opposition to the overall tenor of deception as a useful tool, the manual seems to undercut the utility of deception in the offense stating:

The degree of surprise attained is dependent in a large measure on the coordination and timing of the measures taken to deceive the enemy. Ruses, demonstrations, feints, and other measures for deception executed at the wrong time and place will be obvious to an alert enemy and will warn him of the impending attack. Superior mobility and speed of execution may be determining factors in achieving surprise.³¹

In addition to the operations manual, during this period there were several other manuals directed related to deception. *FM 30-25: Basic Field Manual of Military Intelligence Counterintelligence* expands the guidance of *FM 100-5* with sections on each of the aspects of counterintelligence. Though the section on tactical measures—feints, demonstrations, and ruses—is unfortunately a verbatim repeat of the section in *FM 100-5*, the counterintelligence manual is a de facto deception manual as it provides in depth detail on the cover aspects of concealment and denial through the manual’s emphasis on depriving the enemy access to friendly information. In keeping with the constraint imposed by *FM 100-5*, while the manual encourages commanders to embrace most aspects of deception, false information—e.g., the deliberate loss of notional orders—is restricted to the discretion of the theater commander out of the risk that friendly plans will act on the assumption the enemy has been deceived.

FM 21-45: Basic Field Manual of Protective Measures, Individuals and Small Units, published in 1942, provides further guidance on concealment at the Soldier and unit levels; as well as, reinforcement of the vital necessity to protect military information. Notably, *FM 21-45* sets more stringent guidance for protecting information than current doctrine; for example, the manual states:

Prior to going into combat, all distinguishing marks and insignia on vehicles, equipment, or persons will be removed or obliterated under an officer’s supervision. You must be careful to remove divisional, regimental, or company insignia from your clothes and equipment. Search

³¹ War Department, *Field Manual 100-5: Field Service Regulations*, 1941, 109.

your pockets for letters, memoranda, orders, souvenirs, or keepsakes which might disclose your organization.³²

Additionally, while cover at this time is coupled with deception, the War Department and later the U.S. Army have published a separate manual for camouflage since at least 1940. Despite being treated separately from cover and deception, camouflage was intrinsically linked to both concepts until the late 1960s. The 1940 edition of *FM 5-20: Engineer Field Manual, Camouflage* lists three methods of camouflage: hiding, blending and deceiving.³³ The 1944 edition expands upon the theme of camouflage and deception, devoting an entire chapter to the subject of deceiving camouflage.³⁴ Furthermore, the 1944 edition states:

Camouflage uses concealment and deception to promote our offensive action, to surprise, to mislead the enemy, and to prevent him from inflicting damage upon us. Concealment includes hiding from view, making hard to see clearly, arranging obstructions to vision, deceiving and disguising, and deception involving sound.³⁵

C. POST WORLD WAR II THROUGH VIETNAM

While the 1944 edition of *FM 100-5* is essentially the same as the 1941 edition, the 1949 edition of *FM 100-5* differs in two critical ways with regards to deception. First, this edition of the operations manual introduces a distinct set of principles of war, with surprise being one.³⁶ Second, though counterintelligence continues to include means to deceive the enemy, the separate paragraphs on deception present in the two previous editions are absent.³⁷ The separation of deception from counterintelligence possibly reflects the shift of deception proponentry from the Joint Security Control to the Army

³² War Department, *Field Manual 21-45: Basic Field Manual of Protective Measures, Individuals and Small Units* (Washington, DC: Government Printing Office, 1942), 137.

³³ War Department, *Field Manual 5-20: Engineer Field Manual of Camouflage, 1940* (Washington, DC: War Department, 1940), 3.

³⁴ War Department, *Field Manual 5-20: Camouflage Basic Principles, 1944* (Washington, DC: War Department, 1944).

³⁵ War Department, *Field Manual 5-20, 1944*, 4.

³⁶ Headquarters, Department of the Army, *Field Manual 100-5: Field Service Regulations—Operations, 1949* (Washington, DC: Department of the Army, 1949), 21 – 23.

³⁷ Headquarters, Department of the Army, *Field Manual 100-5, 1949*, 43 – 46.

G3, Plans and Operations Division. The lack of detail on the execution of deception is perhaps best explained by a training memorandum from the Office of the Chief of Army Field Forces to the commanders of the Armor, Infantry, and Artillery Centers. This declassified memorandum reveals the intent of the Army to keep the lessons learned from World War II well under wraps: “The security classification of this whole subject [strategic cover and deception] is and probably will remain TOP SECRET....”³⁸

In 1950, Brigadier General McClure campaigned for the establishment of a psychological warfare division within the Department of Army Special Staff. This division was to have purview over psychological operations, cover and deception, and unconventional warfare; however, when the Office of the Chief of Psychological Warfare was established in 1951, cover and deception were not included in the scope of the office’s operations.³⁹ In 1954, proponenty for deception was assigned to the Ground General School, specifically to the Aggressor Center at Fort Riley, Kansas.⁴⁰ This decision was the General Staff’s halfhearted response to a request from the Commander, Army Field Forces for a purpose built unit trained in deception along the lines of the 23rd Headquarters Special Troops in World War II.⁴¹ The decision to place deception under the Aggressor Center given the Aggressor Center’s role as a professional opposing force seems to demonstrate how quickly the Army drifted from General Eisenhower’s admonishment.

The 1954 edition of *FM 100-5* represents another fundamental revision of the manual; as well as, both the apex of discussion of deception activities within the capstone document and the beginnings of deception’s dismemberment. This iteration of *FM 100-5*

³⁸ Office of the Chief of Army Field Forces, *Strategic and Tactical Cover and Deception Training* (Fort Monroe, VA: Department of the Army, 1948).

³⁹ Alfred Paddock Jr, *US Army Special Warfare. Its Origins: Psychological and Unconventional Warfare, 1941 – 1952* (Washington, DC: National Defense University, 1982), accessed 12 February 2012, <http://handle.dtic.mil/100.2/ADA118758>, 89.

⁴⁰ Concepts and Force Design Group, *Tactical Cover and Deception: Final Report* (Alexandria, VA: U.S. Army Combat Developments Command, 1972), accessed 8 August 2011, <https://www.dtic.mil/DOAC/document?document=ADB966185&collection=ac-tr&contentType=PDF&citationFormat=1f>, 1-3.

⁴¹ U.S. Department of the Army. General Staff, G-3, “Combat Deception,” (1954), Photocopy from U.S. Army Military History Institute, Carlisle, PA.

separates active deception from counterintelligence into a distinct three page section on “combat deception” that includes subsections on the importance of military deception; the fundamentals of military deception; security considerations; planning; and means. The manual advises: “It is imperative that commanders constantly realize the importance of combat deception and that they train their troops and staff in the techniques and planning for combat deception.”⁴² Though the split of deception from counterintelligence elevates the status of deception within the manual, the split has the negative effect of separating deception from the security aspects of cover. Furthermore, while deception is still considered a tool of surprise, a new principle of war, economy of force, admonishes that deception—along with limited attacks, retrogrades, and the defense—is only to be used in non-critical areas in support of the concentration of forces at the decisive point.⁴³ This admonishment runs counter to deception’s economy of force role, and could only serve to dissuade the use of deception.

In 1955, the Ground General School was discontinued and deception proponentcy was transferred along with the aggressor cadre to the Command and General Staff College.⁴⁴ In 1957, the U.S. Army published a field manual dedicated to deception, *FM 31-40: Tactical Cover and Deception*; however, this manual was classified ‘confidential,’ effectively placing it, and therefore detailed deception guidance, out of reach of much of the force. As a consequence of the manual’s publication, the 1962 iteration of *FM 100-5* truncates the section on military deception to two paragraphs on the utility of deception that close with a reference to *FM 31-40*. At the same time, the cover aspects of counterintelligence and camouflage remain intact. Despite the removal of deception guidance to *FM 31-40*, this *FM 100-5* continues the trend of deception being an important part of operations: “Tactical cover and deception plans are an integral part of

⁴² Headquarters, Department of the Army, *Field Manual 100-5: Field Service Regulations—Operations*, 1954 (Washington, DC: Department of the Army, 1954), 37 – 39.

⁴³ Headquarters, Department of the Army, *Field Manual 100-5: 1954*, 47.

⁴⁴ Headquarters, Department of the Army, *General Orders no. 20* (Alexandria, VA: Department of the Army, 1955), www.armypubs.army.mil/epubs/pdf/go5520.pdf. The aggressor cadre was a permanent opposing force designed to provide realism to Army training exercises. The aggressor cadre was equipped with numerous deception aids, including sonic platoons—elements outfitted with loudspeaker equipped vehicles and weapon simulation devices for conducting audio deceptions. See *FM 30-101 (1959)* for more information on the aggressor cadre.

all operations planning.”⁴⁵ Furthermore, this edition of the operations manual includes tactical deception units as a type of combat support element—possibly a reference to the sonic deception units assigned to the aggressor cadre.⁴⁶ The 1968 version of *FM 100-5, Operations of Army Forces in the Field* repeats the short section on deception and a reference to *FM 31-40*. However, missing from this edition of *FM 100-5* is any reference to dedicated deception units as combat support elements; instead, tactical cover and deception is listed as a task of engineering units.⁴⁷ At some point in the early 1960s proponenty for deception was transferred from Command and General Staff College to the U.S. Army Combat Developments Command.⁴⁸

FM 31-40 was updated with changes in 1960 and 1963, and a still classified update to *FM 31-40* was published in 1967.⁴⁹ In 1969, the U.S. Army published *Training Circular 30-1: Tactical Cover and Deception (TC 30-1)*, an unclassified document providing guidance on the training of cover and deception from the company to division level, with the stated intent of encouraging commanders to include cover and deception in their planning process.⁵⁰ In 1973 an update was drafted but not published. Currently none of the editions of *FM 31-40* are available for examination, though an idea of their contents can be drawn from *TC 30-1*. The circular provides a basic overview of the history of deception; definitions of key terms and concepts; general guidelines, responsibilities, and considerations for planning of deception operations; and example

⁴⁵ Headquarters, Department of the Army, *Field Manual 100-5: Field Service Regulations—Operations*, 1962 (Washington, DC: Department of the Army, 1962), 50.

⁴⁶ Headquarters, Department of the Army, *Field Manual 30-101: Aggressor, the Maneuver Enemy*, 1959 (Washington, DC: Department of the Army, 1959), 55 – 57.

⁴⁷ Headquarters, Department of the Army, *Field Manual 100-5: 1962*, 39.

⁴⁸ This shift occurred prior to the still classified 1965 U.S. Army Combat Development Command report titled “Army Requirements for Tactical Deception.”

⁴⁹ The official changes are noted on the entry for the 1967 edition of *FM 31-40* on the Combined Arms Research Library website.
<http://comarms.ipac.dynixasp.com/ipac20/ipac.jsp?menu=search&aspect=subtab316&npp=25&ipp=20&sp=20&profile=carlcgsc&ri=2&source=~!comarms&index=BIB&term=334188&x=0&y=0&aspect=subtab316>

⁵⁰ Headquarters, Department of the Army, *Training Circular No. 30-1: Tactical Cover and Deception* (Washington, DC: Department of the Army, 1969), 3.

applications of deception. Of particular note is the planning consideration of target reaction, which demands a thorough understanding of the target:

Success of cover and deception is dependent on the ability of the deceiver to predict the probable enemy reaction. The staff charged with the deception planning must be able to think as the enemy does and not react as a friendly commander transplanted into the enemy situation. This is possible only as a result of a thorough understanding of the enemy, his culture, and military system. The enemy intelligence system must be evaluated because this system is the vehicle that carries the deception story to the enemy commander. Determination must be made regarding the enemy's characteristics, his habits that make him vulnerable to deception, and those aspects that present the least likely deception target. The probable enemy reaction depends on the commander. An uncertain commander may react to deception while a steadfast veteran commander may ignore all but exceptionally convincing efforts. Some commanders may be overanxious, others overcautious; if possible, we should know the characteristics of the enemy commander, to include the degree of freedom allowed subordinates, his reaction time to new situations, and how this fear of the unknown influences his actions. A single known characteristic of a commander is more important than the entire statistical record of his military career.⁵¹

The one major drawback of *TC 30-1* is that since *FM 31-40* was classified, the information in *TC 30-1* with regards to means, techniques and examples of application is unfortunately shallow.

Looking at the camouflage aspect of deception, the 1959 edition of *FM 5-20* represented the pinnacle of the linkage between camouflage and cover and deception. In the manual's discussion of the nuclear battlefield, the manual explicitly states the role of camouflage in both denying information and deceiving:

The best means of reducing the chance of a unit becoming the target of nuclear attack is to deny the enemy information as to the unit location and strength, or to fool the enemy by deception. Habitual use of proper camouflage will greatly assist in denying this information to the enemy.⁵²

⁵¹ Headquarters, Department of the Army, *Training Circular No. 30-1*, 15.

⁵² Headquarters, Department of the Army, *Field Manual 5-20: Camouflage Basic Principles and Field Camouflage*, 1959 (Washington, DC: Department of the Army, 1959), 3.

Additionally, *FM 5-20* emphatically bound camouflage to deception via the very definition of camouflage: “Camouflage is a French word meaning disguise and is used to describe actions taken to mislead the enemy by misrepresenting the true identity of an installation, an activity, or an item of equipment.”⁵³ Finally, the manual reinforced camouflage’s linkage to cover and deception to the point of subordinating camouflage to deception: “Camouflage, as an element of military deception, permits us to approach unseen and to remain hidden within striking distance of the enemy.”⁵⁴

Between the 1959 edition of *FM 5-20* and its successor in 1968, the relationship between camouflage and deception was severed. In the 1968 edition of *FM 5-20*, the third method of camouflage was changed from “deceiving” to “disguising.”⁵⁵ Though deception was still discussed in the manual, to include a chapter on decoys, the concept of camouflage as an element of deception was thoroughly expunged. The divorce of camouflage from deception was reciprocated on the deception side of doctrine. The 1969 *TC 30-1* listed *FM 5-20* as a reference; however, the 1978 *FM 90-2: Tactical Deception* did not.

D. POST VIETNAM ERA THROUGH DESERT STORM

The 1976 edition of *FM 100-5* is an anomaly within the operations series as the manual is fixated squarely on the operations of a numerically smaller force against numerically superior Soviet forces in Western Europe. Though the distinct section on deception present in previous editions is absent, deception remains thoroughly integrated in the manual. For example, the following guidance is given for the offense: “If a smaller force is to concentrate superior combat power at the point of decision... commanders must employ surprise and deception as well as the full mobility of the force.”⁵⁶ Furthermore, one of the basic tasks of the covering force in the defense is to deceive the

⁵³ Headquarters, Department of the Army, *Field Manual 5-20: 1959*, 3.

⁵⁴ Headquarters, Department of the Army, *Field Manual 5-20: 1959*, 4.

⁵⁵ Headquarters, Department of the Army, *Field Manual 5-20: Camouflage, 1968* (Washington, DC: Department of the Army, 1968), 20.

⁵⁶ Headquarters, Department of the Army, *Field Manual 100-5: Operations, 1976* (Washington, DC: Department of the Army, 1976), 3-6 to 3-7.

enemy, and deny information on friendly force dispositions.⁵⁷ In the section on desert warfare, the manual states, “using deception is a primary means of obtaining success.”⁵⁸ However, despite the relatively complete integration of deception into operations, details on how to execute deception activities are again absent. Oddly, no mention is made of a deception manual within the body of the manual, though *FM 90-2* is listed in the references.⁵⁹

The 1982 and 1986 editions of *FM 100-5* introduce the concept of Airland Battle, a fundamental revision of how the U.S. Army conducts operations. The Airland Battle approach places the principle of maneuver in primacy and embraces Liddell Hart’s indirect approach.⁶⁰ As a result, deception is integrated into the 1982 and 1986 editions of *FM 100-5* to an unprecedented—and unrepeated—degree. Deception is included in the list of major functional areas alongside maneuver, intelligence, and fires.⁶¹ In addition, deception is listed as a reason for offensive action, and discussed in depth in the sections on defense and retrograde operations.⁶² Furthermore, echoing General Eisenhower’s admonishment, the 1986 edition of *FM 100-5* states: “An integral part of any plan of campaign or major operation is the deception plan.... Deception is a vital part of tactical operations as well.”⁶³ The dedicated section on deception, though smaller than the one in the 1954 edition, is still robust and includes examples of deception integration; as well as, some planning guidance.⁶⁴ The section on electronic warfare includes mention of manipulative electronic deception [MED] and imitative communications deception [ICD]

⁵⁷ Headquarters, Department of the Army, *Field Manual 100-5: 1976*, 5-10.

⁵⁸ Headquarters, Department of the Army, *Field Manual 100-5: 1976*, 14-10

⁵⁹ The reference to *FM 90-2* is bizarre given *FM 90-2* was not published until two years after this edition of *FM 100-5*. *FM 31-40* (1967) was the current deception manual at the time of publication.

⁶⁰ Headquarters, Department of the Army, *Field Manual 100-5: Operations, 1982* (Washington, DC: Department of the Army, 1982), 9-1.

⁶¹ Headquarters, Department of the Army, *Field Manual 100-5: Operations, 1986* (Washington, DC: Department of the Army, 1986), 40.

⁶² For offensive operations see: Headquarters, Department of the Army, *Field Manual 100-5: 1986*, 94; for defensive operations see: Headquarters, Department of the Army, *Field Manual 100-5: 1982*, 11 – 12; for retrograde operations see: Headquarters, Department of the Army, *Field Manual 100-5: 1986*, 158.

⁶³ Headquarters, Department of the Army, *Field Manual 100-5: 1986*, 53.

⁶⁴ Headquarters, Department of the Army, *Field Manual 100-5: 1986*, 53.

as electronic warfare activities that support the overall deception plan.⁶⁵ In a striking departure from previous operations manuals, the 1982 edition removes deception from the discussion of surprise as a principle of war, instead moving deception to the principle of security.⁶⁶

In 1978, the U.S. Army retrieved the dedicated military deception manual from classified purgatory and published the unclassified *FM 90-2: Tactical Deception*. As the title implies, the focus of *FM 90-2* is with only the tactical fight: "...tactical deception here refers to short-term actions of corps or lower units within the battle area."⁶⁷ Though this "How to Fight" manual is rather simplistic, its release marked the beginning of a military deception renaissance within the U.S. Army. Of note however, the 1978 field manual severs the connection between deception and the term cover, though it maintains camouflage and concealment as aspects of visual deception. Despite these limitations, *FM 90-2* provides a workable foundation of deception practice, principles, and planning considerations.

In 1986 proponency for deception was transferred to the U.S. Army Intelligence Center and School at Fort Huachuca. Shortly afterwards, *FM 90-2* was updated as *FM 90-2: Battlefield Deception*. The 1988 iteration of *FM 90-2* is an intellectually weighty tome, delving into the cognitive underpinnings of deception as well as providing detailed guidance on the planning and execution of deception at both the tactical and operational levels of war. This manual was designed to address what the U.S. Army considered to be a shortfall in deception integration:

Today, commanders use little deception in planning, directing, and conducting combat operations. As a result, many deception-related skills that have served our Army well in the past have been forgotten, and where remembered, have not been made part of our war-fighting capabilities Armywide.⁶⁸

⁶⁵ Headquarters, Department of the Army, *Field Manual 100-5: 1982*, 7-19.

⁶⁶ Headquarters, Department of the Army, *Field Manual 100-5: 1982*, B-4.

⁶⁷ Headquarters, Department of the Army, *Field Manual 90-2: Battlefield Deception (HTF)* (Washington, DC: Department of the Army, 1978), 1-1.

⁶⁸ Headquarters, Department of the Army, *Field Manual 90-2: Battlefield Deception* (Washington, DC: Department of the Army, 1988), 1-0.

Without having access to the editions of *FM 31-40* for comparison, the 1988 edition of *FM 90-2* represents the strongest presentation of deception theory and practice within U.S. Army doctrine. Shortly after the publication of this edition, deception proponentcy was shifted once more, to the U.S. Combined Arms Center, where it remains.

E. POST COLD WAR ERA

Despite the successful use of deception in Operation DESERT STORM, the 1993 edition of *FM 100-5* almost appears to be a repudiation of the prior editions with regards to deception, and marks the beginning of deception's descent into a doctrinal abyss. Among the principles of war, deception is absent from security, and relegated to a mere factor of surprise; furthermore, economy of force demands force allocations for tasks such as deception be measures so as to not detract from the ability to mass at the decisive point.⁶⁹ Deception is not listed as a combat function; rather, deception is relegated to a single mention as one of the tasks contributing to mobility and survivability.⁷⁰ Finally, the robust section on deception in the 1986 edition is replaced by a two paragraph recitation of the definition of deception and guidance to see *FM 90-2* for further information. Though the term deception continues to appear throughout the manual, the overall marginalization of the concept of deception from the previous manuals is striking. A possible explanation for the marginalization of deception lies in the shift of the strategic equation with the fall of the Soviet Union. The collapse of the Soviet Union left the United States without a peer competitor, and thus without the need for indirect approaches to compensate for numerical inferiority and vulnerable lines of communication.⁷¹

The marginalization of deception continued outside the operations manual. In 1997, the U.S. Army's Combined Arms Center rescinded *FM 90-2* without replacement.

⁶⁹ Headquarters, Department of the Army, *Field Manual 100-5: Operations, 1993* (Washington, DC: Department of the Army, 1993), 2-5.

⁷⁰ Headquarters, Department of the Army, *Field Manual 100-5, 1993*, 2-14.

⁷¹ See Chapter III for further discussion of the relationship between deception integration and perceived balance of power.

The stated reason was that the manual “no longer represents valid Army doctrine.”⁷² In 1998, an unofficial military deception planner’s guide was published with a SECRET classification, again putting the tenets of deception outside the reach of a majority of the force. Additionally, since this was an unofficial document, it is given no reference in subsequent editions of *FM 100-5*. With the rescinding of *FM 90-2*, deception was subsumed by the emerging concept of information operations and incorporated into the 1996 *FM 100-6: Information Operations* as little more than a buzzword. Absent from *FM 100-6* is any guidance on the planning and execution of deception operations; as well as, any mention of the cognitive and theoretical foundations discussed in *FM 90-2*. *FM 3-13: Information Operations* replaced *FM 100-6* in 2003. Though *FM 3-13* provides more discussion on the integration, planning, and execution of deception than *FM 100-6*, the level is still far below *FM 90-2*. Furthermore, *FM 3-13* has fallen out of favor itself and is no longer in synch with *ADP 3-0*, limiting the manual’s appeal.

In the 2001 iteration of the operations manual, now *FM 3-0, Operations*, deception continues its path into doctrinal oblivion. In keeping with the model of *FM 100-6*, deception is relegated to being an element of information operations, and an aspect of information superiority. While deception returns to the discussion of the principle of security, deception is absent from the principle of surprise.⁷³ The separate section on deception is limited to a single paragraph which restates the definition of military deception; gone is the guidance to refer to a deception field manual because the 1988 version of *FM 90-2* was phased out without replacement. As with the 1993 *FM 100-5*, the term deception is present, but the concept is not.

The 2008 edition of *FM 3-0* sees deception, now categorized as an information task, again limited to a single paragraph with a reference to *FM 3-13: Information Operations* and the joint forces publication on military deception, *JP 3-13.4: Military*

⁷² Memorandum signed by Colonel Clinton J. Ancker III, Director, Corps and Division Doctrine, dated 30 September 1996 as cited in Bradley K. Nelson, “Battlefield Deception: Abandoned Imperative of the 21st Century” (Monograph, U.S. Army Command and General Staff College, 1997), 28, accessed 2 January 2012, <http://handle.dtic.mil/100.2/ADA339425>.

⁷³ Headquarters, Department of the Army, *Field Manual 3-0: Operations*, 2001 (Washington, DC: Department of the Army, 2001), 4-14.

Deception. For the first time since 1914, the concepts of feints and demonstrations—in fact, the very words—do not appear within the operations manual. The early 2011 change to *FM 3-0* gives deception three paragraphs as an element of inform and influence activities, though there is a note stating: “military deception will migrate to another functional area in future editions of *FM 3-0*.”⁷⁴ Interestingly, this edition does not reference the still current *FM 3-13* for deception guidance, rather it points to *JP 3-13.4*, the joint force publication. *ADP 3-0: Unified Land Operations* superseded *FM 3-0* as part of the Army’s “Doctrine 2015” program. *APD 3-0*, weighing in at a concise 32 pages, does not mention deception at all, and relegates all inform and influence operations to three uses of the term without elaboration or mention of external references.

The 1990 edition of *FM 5-20*, renamed *FM 20-3: Camouflage*, further reduces the relationship of camouflage to deception by removing the chapter on decoys and stating that camouflage and deception are part of a set of interrelated tactical measures supporting survivability.⁷⁵ In 1998, *FM 20-3: Camouflage, Concealment and Decoys* introduces the term Camouflage, Concealment, and Decoys [CCD]. It is important to note the level of the disjunction between deception and cover at this point. While at the Army level the acronym CCD means the aforementioned Camouflage, Cover, and Decoys; at the joint level CCD means Camouflage, Concealment, and Deception [the Army refers to the joint version of CCD as JCCD]. Further, whereas the 1990 edition includes deception in the interrelated tasks supporting survivability, the 1998 edition removes deception. While essentially ignoring the connection between deception and camouflage, *FM 20-3* does ironically state in a standalone paragraph in its introduction:

Deception helps mask the real intent of primary combat operations and aids in achieving surprise. Deception countermeasures can delay effective enemy reaction by disguising information about friendly intentions, capabilities, objectives, and locations of vulnerable units and facilities.⁷⁶

⁷⁴ Headquarters, Department of the Army, *Field Manual 3-0: Operations, Change 1* (Washington, DC: Department of the Army, 2011), 6-19.

⁷⁵ Headquarters, Department of the Army, *Field Manual 20-3: Camouflage*, 1993 (Washington, DC: Department of the Army, 1990), 1-1.

⁷⁶ Headquarters, Department of the Army, *Field Manual 20-3: Camouflage, Concealment, and Decoys*, 1999 (Washington, DC: Department of the Army, 1999), 6.

The 2010 iteration of the Army's camouflage doctrine, *ATTP 3-34.39: Camouflage, Concealment, and Decoys* represents a complete reversal of earliest editions of camouflage field manuals, calling deception a component of CCD. However, the publication offers no discussion or guidance on deception.⁷⁷

F. CONCLUSIONS OF DOCTRINE REVIEW

A review of the U.S. Army capstone document for operations from 1905 to present shows the emergence and growth of deception as an operational concept. However, the level of emphasis is cyclic, with peaks occurring during and immediately after World War II, and during the late 1970s through 1980s. Conversely deception integration is at its weakest prior to World War I, and since the end of the Cold War. Furthermore, the only time all the aspects of deception were unified under one concept was during the World War II era when the aspects were bundled under the aegis of counterintelligence. Since that time, deception was slowly and methodically dismembered and marginalized to the point that camouflage is no longer considered a form of deception and the term “cover” has completely lost its connection to deception within U.S. Army doctrine.⁷⁸

⁷⁷ Headquarters, Department of the Army, *Army Tactics, Techniques, and Procedures 3-34.39: Camouflage, Concealment, and Decoys/Marine Corps Reference Publication 3-17.6A* (Washington, DC: Department of the Army, 2010), iv.

⁷⁸ Headquarters, Department of the Army, *Field Manual 1-02: Operational Terms and Graphics* (Washington, DC: Department of the Army, 2004), 1-49; (Army) 1. Protection from the effects of fires. (FM 6-0) 2. A form of security operation whose primary task is to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Unlike a screening or guard force, the covering force is a self-contained force capable of operating independently of the main body.

III. EXPLANATIONS FOR VARIATION OF DECEPTION EMPHASIS

As can be seen from the longitudinal survey of deception within U.S. Army doctrine, deception is consistently mentioned; however, the degree of emphasis and level of guidance varies significantly over time. The variance in deception emphasis has driven deception authors to propose numerous explanations as to why the U.S. Army does not treat deception with a greater level of emphasis given deception's demonstrated utility. The reason given the most weight is the idea that America's desired style of warfare, firmly grounded in cumulative destruction and influenced heavily by Clausewitz, leaves little consideration for indirect methods like deception.⁷⁹ The second reason, espoused by Herbert Goldhamer, is the rise of a professional officer class separated officers from the political practice of deception.⁸⁰ A third reason cited is the over-classification of deception post-WWII has had the unintended consequence of removing deception from consideration by the force. Fourth, various authors have pointed to the perception within Western culture that deception is immoral as reducing the desire to embrace deception's worth. While none of these explanations completely explain the diminished role of deception in U.S. Army doctrine, the American style of war best explains the fluctuations.

A. THE AMERICAN WAY OF WAR

The most frequent explanation of why the U.S. Army has not consistently placed the degree of emphasis on deception commensurate of deception's utility is that the style of war preferred by the United States does not emphasize indirect approaches, including deception. In order to assess this explanation it is necessary to first analyze the styles of war to see if there is a variation of deception emphasis between the styles, then examine

⁷⁹ Russell Weigley, *The American Way of War: A History of United States Military Strategy and Policy*, Indiana University Press paperback ed. (Bloomington IN: Indiana University Press, 1977), 584.

⁸⁰ Herbert Goldhamer, *Reality and Belief in Military Affairs: A First Draft (June 1977)* (Santa Monica, CA: The Rand Corporation, 1979), accessed 25 August 2011, <http://www.rand.org/content/dam/rand/pubs/reports/2005/R2448.pdf>.

whether the United States has a preference for one style of war, and finally, what reasons might drive any United States preference for a particular style.⁸¹

1. Styles of War

Essential to understanding the role, or lack of a role, of deception in the U.S. Army is an understanding the two warfighting styles employed by the U.S. Army. On one end of the spectrum is cumulative destruction, which includes what Hans Delbrück and Russell Weigley refer to as the strategy of annihilation, and what Basil Liddell Hart and Edward Luttwak call attrition. On the other end of the spectrum is systemic disruption, which includes Delbrück and Weigley's strategy of attrition; as well as, the indirect approach by Liddell Hart, and relational maneuver by Luttwak.⁸² Cumulative destruction seeks to destroy the enemy's capacity for war by decisive defeat of the enemy's military forces, and exemplified by the battles of Cannae, Austerlitz, and the trenches of World War I, especially the German strategy at the Battle of Verdun. Because successful application of the cumulative destruction approach is rooted in the ability of a force to effectively inflict greater net damage on the enemy force, the approach is dependent on an overall force superiority. Even if an inferior force can achieve a series of tactical victories, the additive effect of the losses results in strategic defeat.⁸³ For example, General Lee's tactical victories over General Grant in the 1864 campaign came with unsustainable manpower losses for the Confederate force, resulting in the final strategic defeat and surrender at Appomattox.

Systemic disruption seeks to achieve victory through attacks against the enemy's weaknesses, (e.g., popular will, production capacity, communications, and command and

⁸¹ Author's note: the discussion of styles of war within this thesis is solely in the context of emphasis on deception; any evaluation of the superiority of one style of war over the other is beyond the scope of this work.

⁸² The terms cumulative destruction and systemic disruption are used because the various authors have used the term attrition with diametrically opposed meanings. Delbrück and Weigley equate attrition with the strategy of exhaustion; see Delbrück's *The History of the Art of War*. On the other hand, Luttwak, Erfurth, and Boyd use attrition with the meaning *Vernichtungsfeldzug* [annihilation through a series of battles]; see Luttwak's "Notes on Low-Intensity Warfare." In a similar vein, there is a risk of unintentional conflation of relational-maneuver with the maneuver principle of war.

⁸³ Edward Luttwak and Steven Canby, *MINDSET: National Styles in Warfare and the Operational Level of Planning, Conduct and Analysis* (Pontiac, MA: C&L Associates, 1980).

control) which leave the enemy paralyzed and unable to react effectively. The exemplars for systemic disruption are the German blitzkrieg, most forms of guerrilla warfare, and the AirLand Battle concept. Because the systemic disruption approach places strength against weakness, the potential effect is not dependent on overall force superiority. An inferior force has the potential for strategic victory over a superior force; therefore inferior forces must lean towards a systemic disruption approach in order to have a chance at prevailing.⁸⁴ Guerrilla campaigns and insurgencies by necessity spend most of their time tilted heavily toward systemic disruption, as a toe-to-toe fight with government forces from a position of inferiority invites defeat. For example, during the Tet Offensive, the Viet Cong attempted to shift to a cumulative destruction posture resulting in the destruction of the Viet Cong as an effective fighting force.

| | Cumulative Destruction | Systemic Disruption |
|-------------------------|---|--|
| Target | Strength against Strength | Strength against Weakness |
| Endstate | Incapacitation through attrition of resources (e.g., manpower, equipment, supplies); <i>Materialschlacht</i> (battle of material) | Incapacitation through strategic paralysis |
| Focus of Efforts | Tactical level, with objectives in terms of terrain | Operational level, with objectives in terms of shattering the enemy |
| Outcome | Predictable, based on “overall superiority of net attrition capacity” ⁸⁵ | Unpredictable, based on ability to perceive and affect enemy weaknesses |
| Orientation | Interior focus on processes to achieve maximum efficiency of tasks | External focus to identify enemy weaknesses and limitations |
| Force Design | Systems and formations designed for all-around capabilities – infrequent, revolutionary changes to capabilities | Systems and formations designed for specific enemy forces – frequent, evolutionary changes to capabilities |

Table 1. Characteristics of Cumulative Destruction and Systemic Disruption

⁸⁴Luttwak and Canby, *MINDSET: National Styles in Warfare*, 6.

⁸⁵ Luttwak and Canby, *MINDSET: National Styles in Warfare*, 3.

⁸⁶ Luttwak and Canby, *MINDSET: National Styles in Warfare*, 1 – 29; William Lind, “The Case for Maneuver Doctrine,” in *The Defense Reform Debate*, eds. Asa Clark, Peter Chiarelli, Jeffrey McKittrick, and James Reed (Baltimore: The John Hopkins University Press, 1984), 88 – 100.

Cumulative destruction and systemic disruption as described above actually represent a false dichotomy for the sake of analysis. In practical application, pure expressions of either approach do not exist. Rather, all warfighting can be envisioned as existing on a spectrum between cumulative destruction and systemic disruption, exhibiting aspects of each style.⁸⁷ The degree to which a commander's style tips towards cumulative destruction or systemic disruption influences the degree to which deception is practiced. Luttwak suggests that forces leaning towards the cumulative destruction style tend to be more focused on internal processes and organization than on the enemy since victory is achieved by the most effective and efficient application of superior firepower. Because of this inward perspective, there is less effort given to understanding the enemy to the degree needed for effective deception. Conversely, systemic disruption oriented forces are more focused on the external since victory is achieved through the identification and exploitation of enemy weaknesses.⁸⁸ Deception is considered to be one of the three interrelated principles of systemic disruption, along with avoidance of the enemy's main strength and dominance of momentum.⁸⁹ As a result of the centrality of deception to systemic disruption, the deception plan is elevated "...to full equality with the battle plan; certainly deception planning cannot remain a mere afterthought."⁹⁰ Thus, as a force leans towards cumulative destruction, the emphasis of deception decreases, and conversely, as the force leans towards systemic disruption, the emphasis of deception increases.

Clausewitz's *On War* and Jomini's *The Art of War* are considered the pillars of the cumulative destruction mode of warfighting. Sun Tzu's *The Art of War* and Basil Liddell Hart's *Strategy* are representative of the systemic disruption model. Colonel John Boyd's "Patterns of Conflict" provides a thorough comparison between the two styles, though Boyd's preference for systemic disruption colors the discussion. Additionally,

⁸⁷ Luttwak and Canby, *MINDSET: National Styles in Warfare*, 10; Huba Wass de Czege, "Army Doctrinal Reform," in *The Defense Reform Debate*, eds. Asa Clark, Peter Chiarelli, Jeffrey McKittrick, and James Reed (Baltimore: The John Hopkins University Press, 1984), 103.

⁸⁸ Edward Luttwak, "Notes on Low-Intensity Warfare," *Parameters* 8, no. 4 (1983), accessed 14 July 2011, <http://www.carlisle.army.mil/usawc/Parameters/Articles/1983/1983%20luttwak.pdf>, 13.

⁸⁹ Luttwak and Canby, *MINDSET: National Styles in Warfare*, 20 – 21.

⁹⁰ Luttwak and Canby, *MINDSET: National Styles in Warfare*, 17.

Michael Handel's *Masters of War* offers side-by-side comparison and analysis of Clausewitz, Jomini, and Sun Tzu; as well as, Machiavelli and Mao Tse-tung.

2. American Preference for Cumulative Destruction

As Lysander suggested, when the skin of the lion—force—will not suffice, then the skin of the fox—guile—must be used to cover the gap. The inherent implication to this advice is when the skin of the lion is sufficient, the fox is not needed. Several authors mention the evolution of Napoleon's warfighting as the exemplar for this relationship. As Napoleon's armies grew in power and capability, Napoleon transitioned from a reliance on cunning and misdirection to a reliance on force.⁹¹ Weigley, in his classic, *The American Way of War*, states as his premise that America fought a war of systemic disruption during the Revolutionary War because the nascent nation was too weak to fight a war of cumulative destruction; however, after the Revolution as the nation grew and strengthened, the strategy of cumulative destruction became the preferred America strategy.⁹² Even during the Revolutionary War there was resistance to the systemic disruption approach employed by General Washington, as exemplified by John Adams in a letter to Abigail Adams: "I am sick of Fabian systems in all quarters. The officers drink, A [*sic*] long and moderate war. My toast is, A [*sic*] short and violent war."⁹³ John Adams' desires are frequently reflected in U.S. Army doctrine. For example, *FM 100-5* (1939) states:

The *ultimate objective* [emphasis in original] of all military operations is the destruction of the enemy's armed forces in battle.... Concentration of *superior forces* [emphasis in original], both on the ground and in the air, at the decisive place and time, creates the conditions most essential to decisive victory and constitutes the best evidence of superior leadership.⁹⁴

⁹¹ J. Bowyer Bell, "Toward a Theory of Deception," *International Journal of Intelligence and Counterintelligence*, 16, no. 2 (2003), 251;

⁹² Weigley, *The American Way of War*, xxii.

⁹³ John Adams, Abigail Adams and Charles Adams, *Familiar Letters of John Adams, and His Wife Abigail Adams during the Revolution. with a Memoir of Mrs. Adams* (New York: Hurd and Houghton, 1876), 305.

⁹⁴ War Department, *Tentative Field Service Regulations of Operations*, 1939, 27.

Additionally, *FM 100-5* (1993) states the American people's desire for short, decisive war:

The American people expect decisive victory and abhor unnecessary casualties. They prefer quick resolution of conflicts and reserve the right to reconsider their support should any of these conditions not be met.⁹⁵

These attitudes are the essence of cumulative destruction, and help demonstrate the U.S. Army's preference for that style of war.

Since the United States tends towards the cumulative destruction side of the spectrum, U.S. Army doctrine tends to embrace Clausewitz's positions on the execution of war. As a result, Clausewitz's disdain may have an impact on deception's place in doctrine. Clausewitz writing about craft and cunning stated: "The fact remains that those qualities do not figure prominently in the history of war. Rarely do they stand out amid the welter of events and circumstances."⁹⁶ As for the act of deception, Clausewitz argues:

To prepare a sham action with sufficient thoroughness to impress an enemy requires a considerable expenditure of time and effort, and the costs increase with scale of the deception. Normally, they call for more than can be spared, and consequently so-called strategic feints rarely have the desired effect.⁹⁷

Goldhamer suggests this blatant disregard for the historic record as the "bias of a professional soldier for whom the conflict of force with force and the destruction of the enemy on the battlefield were the principle instruments in the art of war."⁹⁸ Handel suggests that Clausewitz and Jomini's diminishing of deception and trickery in war was a result of the period in which they fought.⁹⁹ Handel further points out that Clausewitz's method of war relied on a concentration of forces at the decisive point, and that deceptive feints and demonstrations reduced a commander's ability to mass his forces.¹⁰⁰

⁹⁵ Headquarters, Department of the Army, *Field Manual 100-5*, 1993, 1-3.

⁹⁶ Carl von Clausewitz, *On War*, trans. Michael Howard and Peter Paret, 3rd ed. (New York: Alfred A. Knopf, Inc., 1993), 238.

⁹⁷ Clausewitz, *On War*, 239

⁹⁸ Goldhamer, *Reality and Belief in Military Affairs*, 100.

⁹⁹ Michael I. Handel, *Masters of War : Classical Strategic Thought*, 3rd rev. and expanded ed. (London; Portland, OR: Frank Cass, 2001), 216.

Regardless of the reasoning at the time behind Clausewitz's diminishment of the utility of deception, his work continues to influence the development of U.S. military doctrine.

3. Balance of Power

If one accepts that the U.S. Army tends to favor a cumulative destruction style, why has U.S. Army doctrine on occasion increased its emphasis on deception? The answer may lay in the comments of Weigley and others: perceived and actual balances of power influence the proportions of cumulative destruction and systemic disruption within a force's particular warfighting style. If there is a significant imbalance between opponents, the stronger force can rely on its strength to overcome the opposition. J. Bowyer Bell states:

Power and capacity, as in real life, can make deception unnecessary. Napoleon, as the power of his armies increased, relied more on force and less on cunning and misdirection. In an invasion of a small country, the larger aggressor need only dispatch overwhelming power: how could Grenada repulse the forces of the United States.... American military strategy has often been based on deploying maximum power and technological capability without recourse to duplicity—"more" is more and force needs no enhancing..."¹⁰¹

Because a superior force does not need to rely as heavily on aspects of systemic disruption like deception, while conversely an inferior force must shift weight towards a systemic disruption approach, there is a trend whereby the level of emphasize on deception within U.S. Army doctrine waxes and wanes as the perceived and actual balance of power shifts (Figure 2).

¹⁰⁰ Handel, *Masters of War*, 225.

¹⁰¹ Bell, "Toward a Theory of Deception," 251; A similar opinion is stated in *Secret Soldiers*: "An army possessing overwhelming numbers of troops or material would not have to resort to wiles." Philip Gerard, *Secret Soldiers* (New York: Penguin Group, 2002), 5.

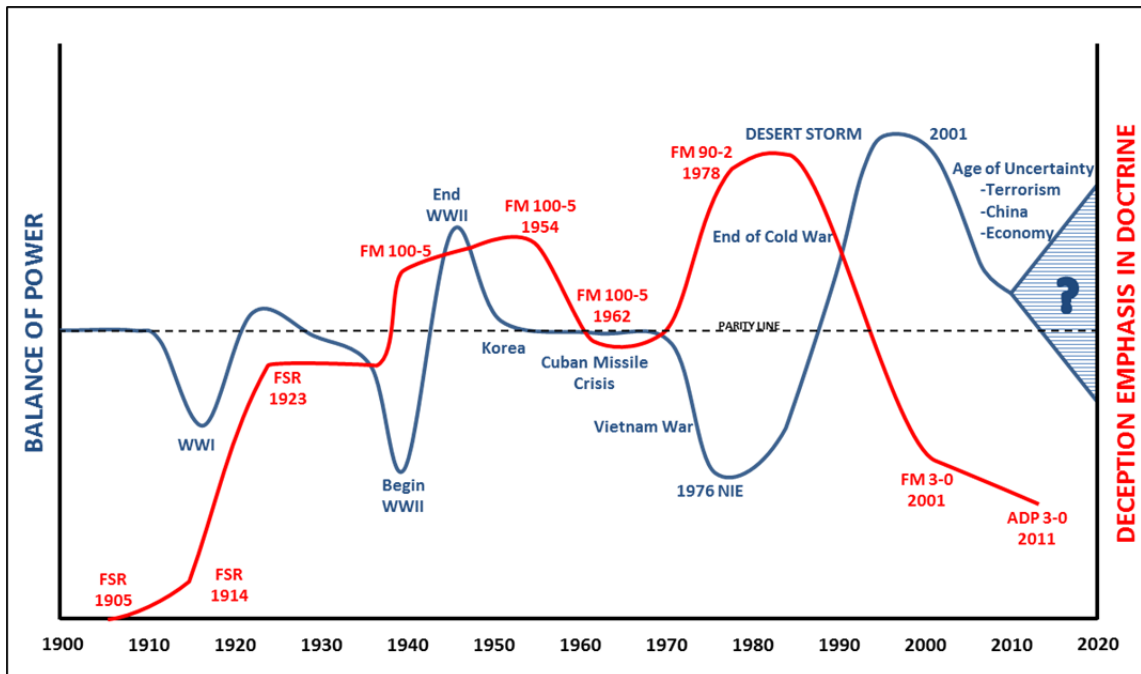


Figure 2. Comparison of Balance of Power and Doctrinal Emphasis of Deception

During World War I, the German military was seen initially as a superior competitor, thus during World War I deception—especially the covering aspects of camouflage and operations security—increased in importance. This increase is reflected by the inclusion of sections on counterinformation and surprise in the 1923 *Field Service Regulations*. Similarly, during World War II the Axis was seen as an existential threat, and deception reached a crescendo. Post-World War II, the United States operated from a position of parity during the Cold War, and over time deception receded from the operations manuals.¹⁰²

The 1970s represented a tectonic shift in the perceived balance of power. First, the failures of Vietnam, the Mayaguez incident, and the failed attempt to rescue the hostages in Iran caused a crisis of faith within the U.S. Army leading to the development

¹⁰² The emergence of the Special Forces and the rest of the special operations community can be viewed as the U.S. attempt to keep the conventional forces focused on cumulative destruction while still leveraging the value of systemic disruption.

of the Airland Battle doctrine.¹⁰³ Second, the 1976 National Intelligence Estimate on Soviet military capability included a second assessment which painted the Soviet military as superior to the United States military in both nuclear and conventional forces:

*Within the ten year period of the National Estimate the Soviets may well expect to achieve a degree of military superiority which would permit a dramatically more aggressive pursuit of their hegemonial [sic] objectives, [italics in original] including direct military challenges to Western vital interests, in the belief that such superior military force can pressure the West to acquiesce or, if not, can be used to win a military contest at any level.*¹⁰⁴

Additionally, the National Intelligence Estimate addendum reassessed Soviet intentions, painting a picture that the Soviet Union was a far greater and imminent threat than previously recognized. This radical re-estimation of Soviet capabilities and intentions shifted the perceived balance of power, placing the U.S. in an inferior position. As a result, U.S. Army doctrine at the time increased emphasis on systemic disruption and deception. The 1976 edition of *FM 100-5* fixates almost totally on operations in Western Europe against a superior force. This manual also marks the reemergence of deception emphasis to a degree not seen for decades. Furthermore, the era marks a renaissance of deception throughout the U.S. Army culminating with the central use of deception during Operation DESERT STORM. The 1982 and 1986 editions of *FM 100-5* see the U.S. Army doctrine at the apex of systemic disruption.

With the collapse of the Soviet Union in 1991, the United States was left without a peer competitor. As a result, the balance of power shifted decisively in the favor of the United States, alleviating the perceived need to emphasize systemic disruption. In the absence of an overpowering threat, U.S. military doctrine returned to the comforts of the cumulative destruction style of war, and deception emphasis ebbed to the point that the current capstone operations manual, *APD 3-0*, does not mention deception at all.

¹⁰³ William Lind, "Defense Reform: A Reappraisal," in *The Defense Reform Debate*, eds. Asa Clark, Peter Chiarelli, Jeffrey McKittrick, and James Reed (Baltimore: The John Hopkins University Press, 1984), 328.

¹⁰⁴ Team "B", *Soviet Strategic Objectives: An Alternative View* (Washington, DC: Director of Central Intelligence, 1976), accessed 16 April 2012, http://www.foia.cia.gov/docs/DOC_0000278531/DOC_0000278531.pdf, 47.

B. PROFESSIONAL OFFICER CLASS

Goldhamer suggests an interesting alternate hypothesis: the rise of the professional officer class led to the marginalization of deception in war. The professional officer class became specialists in the art of the direct approach as described by Clausewitz, and developed a professional pride in using physical force to overcome an adversary. The sense of worth as a professional officer was based in the ability to defeat the enemy in a stand up fight.¹⁰⁵ Gerald in *Secret Soldiers* provides anecdotal evidence supporting Goldhamer's assertion stating:

Not all soldiers are fond of practicing deception. Some American combat commanders in World War II instinctively resisted using deception, preferring to charge straight ahead like the old-style cavalymen they were.... Others... simply preferred conventional battle as a route to honor and glory.¹⁰⁶

Additionally, the political agnosticism of the professional officer class also impacted deception, as it separated military action from foreign political involvements—foreign political involvements are seen by Goldhamer as more conducive to manipulation and deception.¹⁰⁷ The divorce of the senior officer class from diplomacy meant a degradation of peacetime concerns about national strategy; as well as:

...those manipulative and deceptive measures that might strengthen in peacetime the nation's position vis-a-vis a potential enemy by misleading him and weakening his present and future powers of resistance. Such measures require close coordination of military and political leadership, a cooperation less likely to occur given the professional soldier's distance from the foreign office and for the most part, the political leader's and parliamentarian's divorce from strategic and grand strategic concerns."¹⁰⁸

Goldhamer's argument is undermined somewhat by the championing of cover and deception by General Eisenhower during and after World War II; however, the idea of the U.S. Army as a profession of arms is a recurrent theme that may serve to reinforce direct approaches.

¹⁰⁵ Goldhamer, *Reality and Belief in Military Affairs*, 103.

¹⁰⁶ Gerald, *Secret Soldiers*, 7

¹⁰⁷ Goldhamer, *Reality and Belief in Military Affairs*, 103.

¹⁰⁸ Goldhamer, *Reality and Belief in Military Affairs*, 104.

C. OVER-CLASSIFICATION

A third potential explanation for the dearth of deception in U.S. Army doctrine is the over-classification of deception. While security is essential for the execution of deception operations, classification of the very concept can be immensely detrimental to the inculcation of the utility of deception to the force. If future leaders are not exposed to deception during their formative years as junior officers, how can they be expected to appreciate deception's utility later? The negative impact of classification can be seen in a 1948 memorandum from the Office of the Chief of Army Field Forces to the commanders of the Armored, Artillery, and Infantry Centers on the subject of training cover and deception. The cursory introduction to strategic cover and deception was restricted to confidential level with no questions authorized and contained the comment: "The security classification of this whole subject [strategic cover and deception] is and probably will remain TOP SECRET [emphasis in original]..." leaving one to wonder the utility of the training.¹⁰⁹ Tactical cover and deception was subjected to similar classification. Classification of the first two editions of *FM 31-40: Tactical Cover and Deception* effectively removed deception from the playing field. The 1954 edition of *FM 100-5* contained several pages on the planning and execution of tactical cover and deception; however, this was cut to a couple of paragraphs in the 1962 edition.

In addition to the classification of doctrine, the classification of the actual deception operations negatively impacted the institutional memory of the force. The mission of 23rd Headquarters Special Troops, a purpose built deception unit in World War II, was not declassified until 1996.¹¹⁰ With the information on operations compartmentalized behind walls of classification, the memory of deception resting in the minds of the practitioners could not be effectively passed on to future generations of leaders. Thus as the personnel with firsthand knowledge of deception operations retired from the force, the institutional knowledge retired with them.¹¹¹ The double impact of the

¹⁰⁹ Office of the Chief of Army Field Forces, *Strategic and Tactical Cover and Deception Training*, 9.

¹¹⁰ National Army Security Agency Association, "The 23rd Headquarters Special Troops (World War II)" accessed 1 January 2012, <http://www.nasaa-home.org/23rdhqs.htm>.

¹¹¹ Bell, "Toward a Theory of Deception," 251.

classification of both deception doctrine and historic examples of deception placed an extremely high barrier against access of deception resources by junior leaders, inhibiting the development of new institutional memories on the use of deception. The lack of exposure at the junior levels translating into a feeling at higher levels of command that deception is unnecessary—after all, it was not needed at the lower levels.

D. MORALITY

A fourth potential explanation touched on by Jon Latimer, John Bell, and Barton Whaley is that deception is immoral. Honesty has long been considered a virtue within American life as expressed by maxims such as “Honesty is the best policy,” and the apocryphal tale of George Washington and the cherry tree. The idea of the American military as moral paragons is also frequently present in official and unofficial military guidance and writings. For example, General Dempsey [in his paper “America’s Military- a Profession of Arms”] recently stated:

The Profession of Arms demands its members live by the values described in the “City on the Hill” metaphor. We must provide an example to the world that cannot be diminished by hardships and challenges. This example is based upon the words and intent of the US Constitution that each of us takes a personal oath to support and defend. Our oath demands each of us display moral courage and always do what is right, regardless of the cost. We are all volunteers in our willingness to serve and to place others’ needs above our own. As shared values, our calling cards are Duty, Honor, Courage, Integrity, and Selfless Service. Commitment to the rule of law is integral to our values which provide the moral and ethical fabric of our profession.¹¹²

Deception in particular has been viewed as dishonorable, an idea exemplified by the some of the responses over Colonel Funston’s use of deception to achieve victory over the insurgents during the Philippine Insurrection; rather than lauded, Funston was vilified for winning by deceit.¹¹³ On the floor of the Senate, Senator Patterson of

¹¹² Martin Dempsey, “America’s Military—a Profession of Arm” (Washington, DC: Joint Chiefs of Staff, 2012), accessed 24 February 2012, http://www.jcs.mil/content/files/2012-02/022312120752_Americas_Military_POA.pdf, 3.

¹¹³ J. Bowyer Bell and Barton Whaley, *Cheating and Deception* (New Brunswick, NJ Transaction Publishers, 1991), 45.

Colorado accused Funston of violating the rules of civilized warfare.¹¹⁴ Colonel Funston was also the subject of a sermon decrying the use of underhand methods which lower the standard of honor.¹¹⁵ However, while it may be that deception is viewed as immoral, little in U.S. Army doctrine conveys this view. The 1905 edition of *Field Service Regulations* stands almost alone in its level of condemnation of illegal acts of deception.¹¹⁶ Furthermore, a survey of the use of deception by the U.S. Army across the span of its history shows that even if deception is viewed by the organization as immoral the view is not a serious impediment to the execution of deception. Rather, the attitude of Ulisse Guadagnini seems to hold more sway: "Moral considerations have validity only in civilian life and should not interfere with preparations for war."¹¹⁷

E. CONCLUSION

The primary explanation for the undervaluing of deception in U.S. Army doctrine is the emphasis on the cumulative destruction style of war; however, the other explanations play their part in further reducing the level of emphasis. Taken together, the composite effect of the explanations leads to the creation of an organizational bias against deception. Daniel and Herbig state that organizational bias presents itself in two ways. First, there is a "bureaucratic imperative that organizations trained for particular tasks will seek to perform them." Second, due to availability bias, people will think and act in ways familiar to them.¹¹⁸ Allison and Zelikow in *Essence of Decision* present a model for organizational behavior that suggests the behavior is linked more to standard operating procedures and established doctrine than to deliberate choices. Formalized doctrine

¹¹⁴ "Gen. Funston's Action," *The Washington Post (1877 – 1922)* March 28, 1902, ProQuest (144350948).

¹¹⁵ "Funston Subject of Sermon," *New York Times (1857 – 1922)* April 15, 1901, ProQuest (96118056).

¹¹⁶ While acts of perfidy are frequently cited in doctrine as illegal, the 1905 Field Service Regulations described illegal acts of deception using terms like treacherous, fiendishness, and infamy. War Department, *Field Service Regulations, 1905*, 214.

¹¹⁷ Quoted in Waldemar Erfurth, *Surprise*, trans. Stefan T. Possony and Daniel Vilfroy (Harrisburg, PA: Military Service Publishing Company, 1943), 51.

¹¹⁸ Donald C. Daniel and Katherine L. Herbig, "Propositions on Military Deception," in *Strategic Military Deception*, eds. Donald C. Daniel and Katherine L. Herbig (New York: Pergamon Press, 1982), 14.

serves to constrain behavior.¹¹⁹ Thus the degree of emphasis on deception in doctrine translates to the degree of deception operations in practice.

Another area where the organizational bias has impacted deception is the lack of a stable proponentcy. Since 1923, deception has shifted proponentcy numerous times, and has never been in the position of being the primary focus of whatever command held purview. Additionally, some aspects of deception have been separated under different proponents, such as camouflage under the U.S. Army Engineer School. The lack of a stable proponentcy with deception as its central focus further undermines the integration of deception into U.S. Army doctrine three important ways. First, the frequent changes of deception proponentcy impede continuity of knowledge. Second, since deception is never the primary focus for a proponent, deception is always at risk of marginalization in favor of the primary focus. Third, some efforts implemented are abandoned when the proponentcy changes. For example, while deception was under the U.S. Army Intelligence Center and School, the tables of organization for corps and divisions were modified to add deception cells. After deception proponentcy shifted to the U.S. Army Combined Arms Center, the deception cells were dropped in order to support the emerging requirement for unmanned aerial vehicles.¹²⁰

¹¹⁹ Graham Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2nd ed. (New York: Addison Wesley Longman, Inc, 1999), 143 – 145.

¹²⁰ Nelson, “Battlefield Deception,” 29 – 30.

IV. THEORY OF DECEPTION

Every means is permitted which deceives the enemy and induces him to take wrong steps. The lion's bravery and the fox's cleverness must combine to wrest victory from the enemy.

– General Waldemar Erfurth¹²¹

A. WHAT IS DECEPTION

Despite deception's long and storied place in the history of war, J. Bowyer Bell and Barton Whaley assert in, *Cheating and Deception*, that their theory was the first attempt to create a “general theory of cheating.”¹²² Bell and Whaley's theory of deception is elegant in its simplicity. The theory categorizes all deceptions into two interdependent sets: showing the false and hiding the real. These categories are further subdivided into six categories. Hiding the real is divided into the categories of masking, repackaging, and dazzling, while showing the fake is divided into the categories of mimicking, inventing, and decoying. Each category has myriad characteristics that can be drawn from for the deception plan. The categories of deception and the chosen characteristics are used in ruses to create one of five effects: unnoticed, benign, desirable, unappealing, and dangerous. The purpose of the ruse is to create a perception in the target that causes the target to generate an illusion the target interprets as reality, causing the target to act in the desired manner to achieve the deception goal and thus the strategic goal.¹²³ While Bell and Whaley's theory provides a neat and tidy structure for the taxonomy of deception, one weakness of the theory is that it does not delve in the cognitive psychology allowing deception to occur.

Michael Dewar offers a different theory of deception in *The Art of Deception in Warfare*. Dewar's theory is a less structured discussion than Bell and Whaley's theory; nevertheless, the theory provides important insights into the inner workings of deception. Dewar provides an overview of deception means, principles, and techniques. Of

¹²¹ Erfurth, *Surprise*, 198.

¹²² Bell and Whaley, *Cheating and Deception*, 45.

¹²³ Bell and Whaley, *Cheating and Deception*, 45 – 74.

particular note are his comments on the prevalence of preconceived ideas on the battlefield, and the role of doctrinal and technical innovation in achieving surprise.¹²⁴

1. Deception Defined

According to *Random House Webster's*, deception is “something that deceives or is intended to deceive; fraud; artifice.”¹²⁵ While this is a sufficient definition for casual uses, this definition is not sufficient for deception in the context of military operations. Daniel and Herbig in their work “Propositions on Military Deception” define deception as: “the deliberate misrepresentation of reality done to gain a competitive advantage.”¹²⁶ One problem with Daniel and Herbig’s conceptualization of deception is their fixation on deception as being based in falsehood or lies. This concept of deception ignores the ideas of deception by omission and deception by selective truth. Furthermore, the definition makes no mention of the target of the deception. In the definition’s defense, the concept of gaining a competitive advantage is important. Deception in military operations is not undertaken for deception’s sake; deception is undertaken to achieve some goal.

The definition of deception used in U.S. Army doctrine since at least 1969 is a better starting point for a working definition of deception: “Activity designed to mislead an enemy by manipulation, distortion, or falsification of evidence to induce him to react in a manner prejudicial to his interest.”¹²⁷ While the current U.S. Army definition is a good starting point, this definition too is not quite sufficient. The first deficiency with the current doctrinal definition is that “induce” is an imprecise term for what deception does: manipulating the enemy’s decision-making process. Second, the best deceptions rely on a foundation of truth to reinforce and support the falsehoods, an idea the definition seems

¹²⁴ Michael Dewar, *The Art of Military Deception in Warfare*, 1st ed. (Newton Abbot, UK: David & Charles, 1989), 9 – 20.

¹²⁵ *Random House Webster's Unabridged Dictionary*, 2nd ed., revised and updated ed. (New York: Random House Reference, 2001), 516.

¹²⁶ Daniel and Herbig, *Propositions on Military Deception*, 3.

¹²⁷ Headquarters, Department of the Army, *Training Circular no. 30-1: Tactical Cover and Deception*, 5; An almost identical definition is given in the 1957 *Special National Security Estimate: Soviet Capabilities for Deception* by the Central Intelligence Agency: Director of Central Intelligence, *Soviet Capabilities for Deception* (Washington, DC: Central Intelligence Agency, 1957), accessed 30 January 2012. http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&res_dat=xri:dnas&rft_dat=xri:dnas:article:CSE00201

to ignore with the modifiers used to describe the evidence. Finally, the term enemy is unnecessarily constraining, as deception can be applied against any target. A strength of the doctrinal definition is its acknowledgement of the role of intent in human deception. While biological deceptions exhibited in the plant and animal kingdoms can be unintentional, human deception requires intent.¹²⁸

Taking in account the shortcomings of the existing definitions of deception, a modified definition of deception can be crafted:

Deception is the deliberate misleading of a target into taking actions prejudicial to the target's interests by manipulating the target's decision-making processes through the communication of true, manipulated, distorted, and/or falsified information.

This revised definition of deception requires some elaboration. Deliberate misleading does not obligate the practitioner to a formal planning process; while formal planning is preferable, rapid ad-hoc planning by a nimble practitioner can in extremis achieve the objective in time constrained or fluid situations, though with increased risk of failure. Successful deception is more than creating a perception; successful deception is about the target taking action. Furthermore, the goal of a deception can be the target taking no action at all, e.g., the failure of a regime's security apparatus to breach a special reconnaissance element's cover or the German armored divisions remaining in place at Pas de Calais during the opening phases of Operation OVERLORD. The interaction between the practitioner and the target occurs in the framework of communication. Finally, the perceptions used by the target in its decision-making process rely heavily on the indicators created by the practitioner.

2. Deception: Truth and Lies

Many definitions of deception conflate deception with lies; however, this conflation is incorrect as deceptions and lies are not synonymous. In order to discuss the difference between a lie and deception it is first necessary to establish an adequate

¹²⁸ For a discussion on biological deceptions see: Scott Gerwehr and Russell W. Glenn, *Unweaving the Web: Deception and Adaptation in Future Urban Operations* (Santa Monica, CA: Rand, 2002), 78. For a discussion on the requirement for intent in human deception see: Roderick M. Chisholm and Thomas D. Feehan, "The Intent to Deceive," *The Journal of Philosophy* 74, no. 3 (March, 1977), 143 – 159.

definition of each. One definition defines a lie as occurring when a person asserts to a second person a proposition that the first person knows to either be false or not true with the intent of causing the second person to have a justified belief in the proposition.¹²⁹ Since a deception can contain truth—an actual training exercise used as part of a deception is still a true event—it is immediately apparent that deception and lies are not equal; however, this still leaves the proposition that lies are a subset of deception.¹³⁰ For example, Daniel and Herbig’s model of deception has lies and the act of lying subsumed by deception (Figure 3). The definition of deception used here requires injury to the target or advantage for the practitioner; this leaves lies undertaken without the intent of injury or advantage [white lies] to exist outside the sphere of deception. Thus, while the sets of lies and deception overlap, neither subsumes the other (Figure 4). While lies are used in deception, not all deceptions are lies. Judicious use of the truth can be far more supportive of deception than outright falsehood.

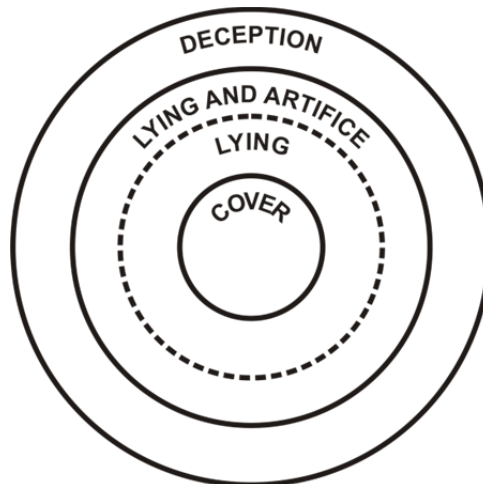


Figure 3. Daniel and Herbig’s “Deception’s Subsidiary Concepts.” (From: ¹³¹)

¹²⁹ Chisholm and Feehan, *The Intent to Deceive*, 152; This work presents an in-depth parsing of what it means to lie and what it means to intend to deceive.

¹³⁰ Chisholm and Feehan provide another illuminating example attributed to Immanuel Kant: “For there are types of intended deception that cannot properly be said to be cases of lying. Kant’s example will do: ‘I may, for instance, wish people to think that I am off on a journey, and so I pack my luggage; people draw the conclusion I want them to draw . . .’ But although I thus succeed in deceiving them, Kant insists, ‘I have not lied to them, for I have not stated that I am expressing my opinion.’” Chisholm and Feehan, *The Intent to Deceive*, 149.

¹³¹ Daniel and Herbig, *Propositions on Military Deception*, 4.

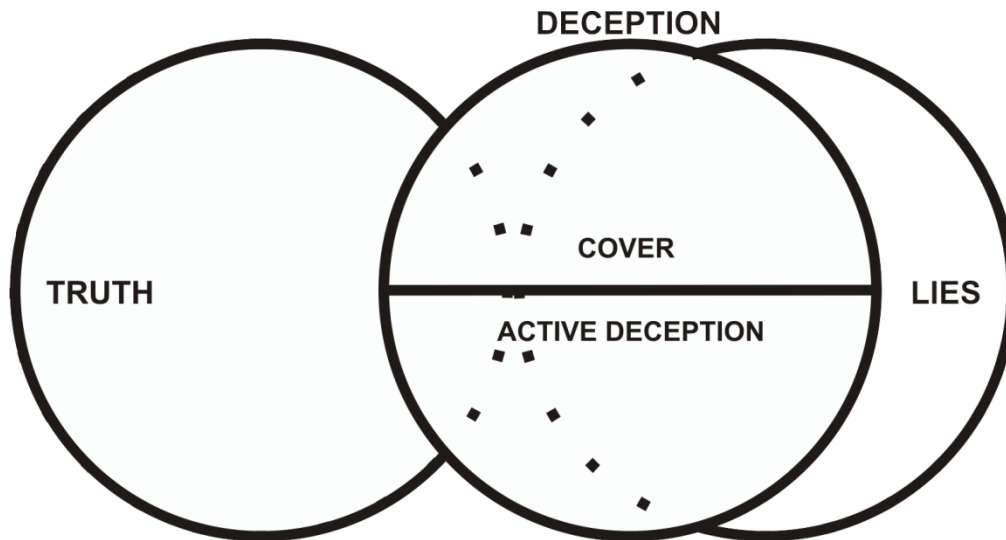


Figure 4. Interrelationship of Truth, Deception, and Lies

B. TAXONOMY OF DECEPTION

1. Taxonomy of Method

Taxonomies are systems of categorizing items in a set into subordinate sets based on a defined system of characteristics. The most recognizable example for taxonomies is the system of classifying living things into kingdoms, phyla, classes, orders, families, genera, and species. Within the field of deception, there are several suggested taxonomies for deception, four of which are: method, sophistication, effect, and commission-omission. Taxonomy by method focuses the mode of the deception, such as a display. Taxonomy by sophistication categorizes deceptions by the degree to which the deception adapts or does not adapt to changing circumstances. Taxonomy by effect focuses on what the deception does, e.g., dazzling. Finally, taxonomy by commission-omission breaks down deceptions based on whether the deception causes the target to acquire a false belief or contributes to the target continuing a false belief. For this purposes of this work, taxonomy by method is used as it closely matches existing U.S. Army doctrinal concepts of deception (Figure 5). Brief descriptions of the alternate taxonomies are provided at the end of this section.

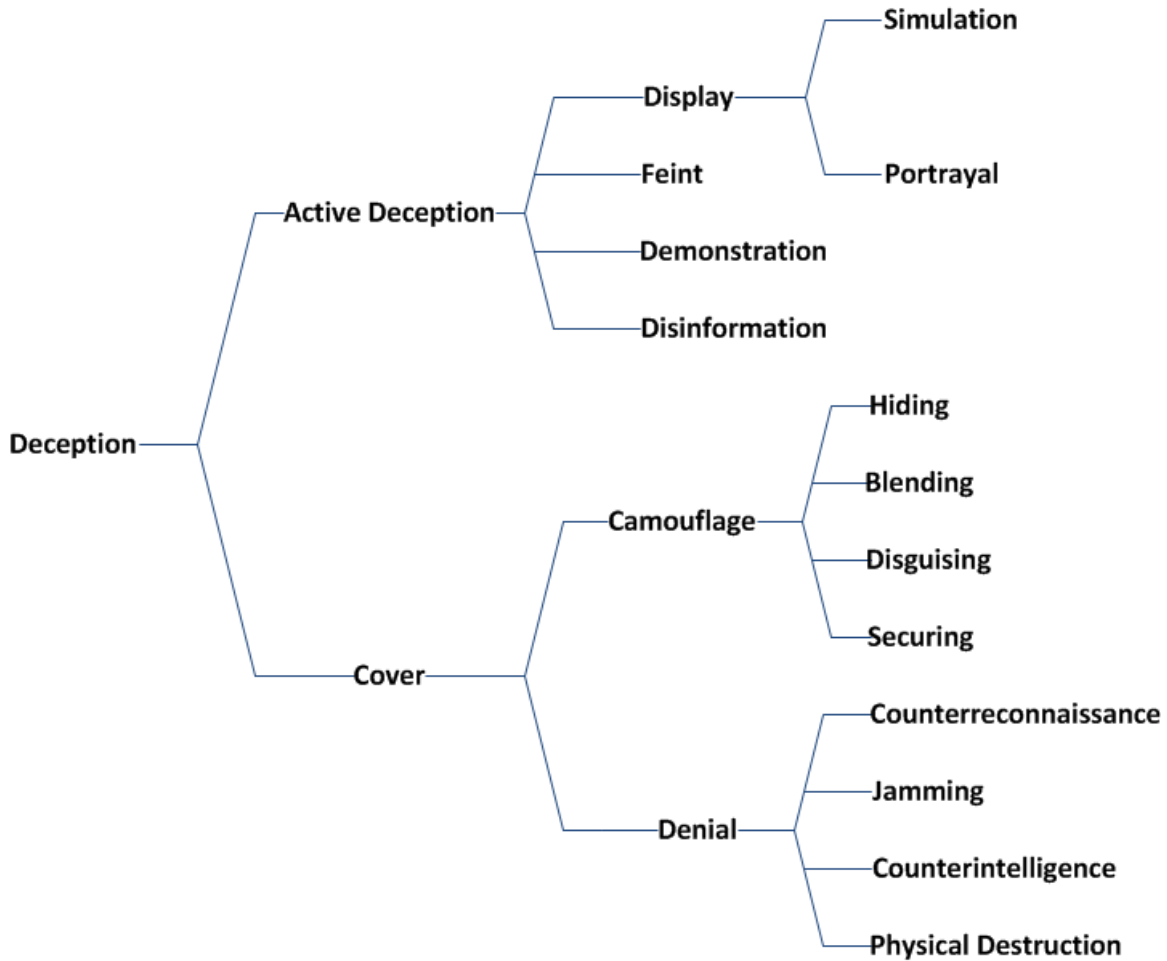


Figure 5. Taxonomy of Deception

2. Deception

Deception is the set of actions designed to deliberately mislead a target into actions or inactions prejudicial to the target's interests by manipulating the target's decision-making processes through the communication of true, manipulated, distorted, or falsified information. Deception is subdivided into two broad categories: active deception and cover. Active deception consists of those actions designed to convey deceptive indicators to the target. Cover, as used here, is the set of actions designed to prevent the target access to the indicators necessary for constructing a correct perception of the situation

and environment, and thus necessary for proper decision-making.¹³² Though some of the actions included in the category of cover are not usually considered to be part of deception in U.S. Army doctrine, the obfuscation of indicators is an intrinsic part of deceiving a target.¹³³

3. Active Deception

Active deception is comprised of actions which convey deceptive information to the target, also referred to as simulation or showing the false. The set of active deception includes those modified versions of the actions traditionally associated with military deception. Active deception is divided into four broad categories: displays, feints, demonstrations, and disinformation.

a. Displays

Displays are static depictions of activities, forces, or equipment for the purpose of deceiving the target's collection apparatus.¹³⁴ Though the formal Army definition of a display limits the type of target collection to visual, displays can also occur in all physical senses; as well, as in the electromagnetic spectrum. Displays are divided into two categories: simulation and portrayal. Simulations use decoys and other devices

¹³² This usage of cover is consistent with historic Army and DOD usage, and in numerous civilian works. See: Headquarters, Department of the Army, *Field Manual 1-02*, 1-48 to 1-49; Concepts and Force Design Group, *Tactical Cover and Deception: Final Report*, 1-4; Daniel and Herbig, *Propositions on Military Deception*, 4; Robert Goldsmith and Ralph Gerenz, *Techniques for Detecting Cover and Deception*, (Billerica, MA: Betac Corporation, 1983), accessed 16 May 2012, <http://handle.dtic.mil/100.2/ADP002896>, 145.

Cynthia Grabo provides an alternative definition for cover which is more constrained: "Cover (here meaning the "cover plan" or "cover story") is a form of military deception which should be distinguished from active military deception, although it may often be used in conjunction with it. Cover will be used when it may be presumed that the military buildup itself cannot be concealed from the adversary, and its purpose therefore is to offer some seemingly plausible explanation (other than planned aggression) for the observable military activity." Cynthia Grabo, *Anticipating Surprise: Analysis for Strategic Warning*, ed. Jan Goldman (Washington, DC: Center for Strategic Intelligence Research, Joint Military Intelligence College, 2002), accessed 14 May 2012, www.ni-u.edu/ni_press/pdf/Anticipating_Surprise_Analysis.pdf, 125.

¹³³ Bell and Whaley, *Cheating and Deception*, 49; Roy Godson and James J. Wirtz, "Strategic Denial and Deception," in *Strategic Denial and Deception: The Twenty-First Century Challenge*, eds. Roy Godson and James J. Wirtz (Piscataway, NJ: Transaction Publishers, 2002), 1 – 2.

¹³⁴ Adapted from official Army definition: "In military deception, a static portrayal of an activity, force, or equipment intended to deceive the adversary's visual observation." Headquarters, Department of the Army, *Field Manual 1-02*, 1-83.

to create a dummy force or capability. Decoys are models or dummies used to replicate actual equipment, buildings, and personnel.¹³⁵ Magruder's Quaker guns were decoys used to create the perception that the Confederate lines were more heavily fortified than they were in reality. MACVSOG's ruse of an active resistance movement in North Vietnam contained major elements of simulation and portrayal.¹³⁶

Portrayals use actual forces to present either the image of a unit which either does not exist, or that the unit is of a different type than it actually is.¹³⁷ An infantry company presenting itself as an infantry battalion or brigade is a form of portrayal. Pseudo-operations and "false flag" operations are specialized forms of portrayals where the unit being portrayed is either a third party or an element of the target's forces. Colonel Funston's ruse during the Philippines Insurrection involved his force portraying the insurgent force in order to gain access to the insurgent camp.¹³⁸ British forces in Kenya used pseudo-operations to masquerade as Mau-Mau elements for the purposes of intelligence collection.¹³⁹ Soviet forces engaged in "false flag" operations during the suppression of resistance movements in Lithuania by posing as the Lithuanian resistance while attacking the population in an effort to separate the resistance from the population.¹⁴⁰ Portrayals also encompass the cyberwar concepts of the honeypot and social engineering.¹⁴¹

¹³⁵ Headquarters, Department of the Army, *Training Circular No. 30-1*, 5.

¹³⁶ See Chapter V for more information on MACVSOG deception operations.

¹³⁷ Headquarters, Department of the Army, *Training Circular No. 30-1*, 10.

¹³⁸ See Chapter V for additional details on Colonel Funston's operation.

¹³⁹ Kitson, Frank, *Gangs and Counter-gangs*, (London: Barry and Rockliff, 1960).

¹⁴⁰ John Prados, *Presidents' Secret Wars*, revised and updated ed. (Chicago: Elephant Paperbacks, 1996), 38.

¹⁴¹ A honeypot is an enticing computer or server designed to draw attacks by adversarial forces. Honeypots may also be classified as a form of feint here since they must survive contact with the target without revealing their true nature. The purpose of the honeypot is typically to gain intelligence about the adversarial forces' capabilities, identities, and location.

b. Feints

Feints are operations designed to deceive the target into reacting as if the feint is an actual decisive operation.¹⁴² Feints differ from demonstrations in that some manner of contact with the target is sought. The degree of contact varies significantly. Feints are used for several purposes; for example, to distract the target from the actual decisive action, facilitating relative superiority at the point of decision; luring the target into exposing artillery positions; or to trick the target into prematurely committing the reserve. *Field Service Regulations* (1914) describes a stronger variant of the feint: holding attack. In addition to distracting the enemy from the main effort, the holding attack seeks to fix the enemy in time and space.¹⁴³ Also, the covering force concept in *FM 100-5* (1976) has an element of feint, though its primary mission is not deception.¹⁴⁴ In addition to traditional offensive and defensive operations, feints also encompass lures designed to draw the target into an unequal fight, e.g., the bait and ambush tactics of guerrilla and insurgent forces.

c. Demonstrations

Demonstrations are deceptive shows of force where actual engagement with the target is not sought.¹⁴⁵ Because contact is not sought with the target, the forces used for a demonstration can be considerably smaller than those used for a feint. While the traditional U.S. Army doctrinal definition of demonstrations implies demonstrations occur in the vicinity of the enemy lines, almost as a less aggressive form of a feint, this is

¹⁴² Adapted from the DOD and Army definitions of feint: “In military deception, an offensive action involving contact with the adversary conducted for the purpose of deceiving the adversary as to the location and/or time of the actual main offensive action. (Army) A form of attack used to deceive the enemy as to the location or time of the actual decisive operation. Forces conducting a feint seek direct fire contact with the enemy but avoid decisive engagement.” Headquarters, Department of the Army, *Field Manual 1-02: Operational Terms and Graphics*, 1-76.

¹⁴³ War Department, *Field Service Regulations*, 1914, 84 – 85.

¹⁴⁴ Headquarters, Department of the Army, *Field Manual 100-5*, 1976, p5-10 to 5-13.

¹⁴⁵ Adapted from the DOD, NATO, and Army definitions of demonstration: “An attack or show of force on a front where a decision is not sought, made with the aim of deceiving the enemy. 2. (DOD only) In military deception, a show of force in an area where a decision is not sought; made to deceive an adversary. It is similar to a feint but no actual contact with the adversary is intended. (Army) 1. A form of attack designed to deceive the enemy as to the location or time of the decisive operation by a display of force. Forces conducting a demonstration do not seek contact with the enemy.” Headquarters, Department of the Army, *Field Manual 1-02: Operational Terms and Graphics*, p1-57 to 1-58.

not the case. Demonstrations include training events and exercises well away from the target. For example, a demonstration of increased airborne training in the United States can be used to create the perception of a pending airborne assault.

*d. Disinformation*¹⁴⁶

Disinformation is the exposure to target collection assets of false, modified, or selectively true information with the intent to deceive.¹⁴⁷ Disinformation has no set form or design; any communication from a presidential proclamation to a scrap of paper left in a waste basket can be used to convey disinformation. The British DOUBLE CROSS system during World War II is considered the exemplar for disinformation, with British intelligence using its control of the German HUMINT networks in Britain and North Africa to great advantage.¹⁴⁸ Disinformation also includes the flooding of the information environment with notional information for the purposes of overloading the target's systems.¹⁴⁹ Deceptions of this type are similar to the jamming denial type, but different in that disinformation flooding contains deceptive indicators intended to mislead the target; whereas, the jamming of a radio net with static does not. Using multiple radio networks to obscure the actual location of a unit is an example of this form of disinformation, as is swamping a regime's police hotline with false reports in order to overwhelm the response system.

¹⁴⁶ Disinformation is used here because most deception literature uses the term "ruse" to mean any manner of deception. Disinformation differs from misinformation in that disinformation requires intent to deceive; whereas, misinformation does not require intent to deceive, though the intent may be present.

¹⁴⁷ Adapted from the DOD definition; Headquarters, Department of the Army, *Field Manual 1-02*, 1-82. Also see Barton Whaley, *Stratagem: Deception and Surprise in War* (Cambridge, MA, Center for International Studies Massachusetts Institute of Technology, 1969), accessed 16 February 2012, <http://www.vietnam.ttu.edu/virtualarchive/items.php?item=2171516001>, 17.

¹⁴⁸ See David Mure's *Master of Deception* and Ben MacIntyre's *Agent Zigzag* for further information on the British DOUBLE CROSS system.

¹⁴⁹ Barton Whaley, *Stratagem: Deception and Surprise in War* (Norwood, MA: Artech House, 2007), 9.

4. Cover

Cover is the set of actions taken to protect the actual mission by preventing the deception target from receiving the indicators of real actions, capabilities, or intentions.¹⁵⁰ Whereas active deception seeks to provide misleading information to the deception target, cover seeks to obfuscate by masking indicators and closing channels. There are two categories of cover: camouflage and denial.

a. *Camouflage*

Camouflage seeks to prevent indicators from being detected by the target's collection assets. Within camouflage, there are four broad methods: hiding, blending, disguising, and securing. In hiding the item is concealed by a physical barrier; such as, a bunker, cave, forest canopy, or netting. The physical barrier itself may be visible, blended into the background, or disguised. In blending, the item is concealed by means that merge the item with the background. This can be accomplished in the field through the application of camouflage paint or natural materials. In disguising, the item is concealed by making it look like something innocuous, such as a bunker disguised as a farmhouse.¹⁵¹ In securing, indicators are reduced via the use of operations security, information security, and emissions control. While not traditionally considered aspects of camouflage, securing functions serve the same purpose—suppression of friendly indicators. The concepts of camouflage are applicable across the spectrum of operations. A special operations team operating out of a safe house is hidden within the safe house, which in turn is blended into the surrounding neighborhood. A HUMINT team attached to a maneuver element is blended in with the element. An intelligence officer conducting special reconnaissance while posing as a tourist is disguised. Through proper document disposal procedures, information is secured.

¹⁵⁰ Headquarters, Department of the Army, *Training Circular No. 30-1*, 5; see Note 130 for more information on this definition of cover versus the competing definition.

¹⁵¹ Headquarters, Department of the Army, *Field Manual 5-20*, 1968, 17 – 20.

b. Denial

Whereas camouflage focuses on masking indicators, denial attacks the channels indicators travel on to the target. Denial seeks to degrade target collection channels so that the adversary is either not able to receive indicators, or is herded onto a smaller set of channels. Forcing the target to depend on a smaller set of channels reduces the ability of the target to validate intelligence using multiple sources, reducing the effort necessary in telling the deception story. Additionally, if the target can be herded onto channels controlled by friendly forces, deception indicators can be fed directly into the target's intelligence cycle, as was the case with the British DOUBLE CROSS operation in WWII. Denial methods include counterreconnaissance, jamming, counterintelligence, and physical destruction of collection tools. While these methods are not normally considered aspects of deception by U.S. Army doctrine, they are forms of cover to be considered during any deception planning and execution.

5. Alternate Deception Taxonomies

In addition to the method-based taxonomy of deception, there are other taxonomies for deception. Three alternate taxonomies are: commission and omission; level of sophistication; and effect-based. These taxonomies are useful for expanding the ways to think of deception.

a. Commission and Omission

Chisholm and Feehan in "Intent to Deceive" delineate eight types of deception divided into two categories. Deceptions by commission are typified by the deceiver contributing causally to the belief of the target. Deceptions by omission are typified by the deceiver facilitating the target's maintenance of an existing belief.

| |
|--|
| Deception by Commission 1- Deceiver contributes causally to target acquiring belief in the proposition 2- Deceiver contributes causally to target continuing to believe in the proposition 3- Deceiver contributes causally to target stopping belief in the negation of the proposition 4- Deceiver contributes causally to target not acquiring belief in the negation of the proposition |
| Deception by Omission 5- Deceiver allows target to acquire belief in the proposition 6- Deceiver allows target to continue belief in the proposition 7- Deceiver allows target to cease belief in the negation of the proposition 8- Deceiver allows target to continue without the belief in the negation of the proposition |

Table 2. Chisholm and Feehan's Eight Ways to Deceive.¹⁵²

b. Level of Sophistication

Gerwehr and Glenn in *Unweaving the Web: Deception and Adaptation in Future Urban Operations* present a way to categorize deceptions based on the level of sophistication used in the deception. Sophistication is determined by the degree to which the deception takes in count the variables of a situation, e.g., environmental factors, target capabilities, target preconceptions, and the context of the situation. There are four levels of sophistication, ranging from least to most sophisticated: static, dynamic, adaptive, and preemptive. Static deceptions are the least sophisticated of deceptions and "...are in place regardless of state, activity, or the histories of either the deceiver or target."¹⁵³ The Army Combat Uniform is an example of static camouflage. "Dynamic deceptions are those that activate under specific circumstances. The ruse itself and the trigger do not change over time, nor do they vary much by circumstance or adversary."¹⁵⁴ A howitzer battery having established procedures to erect camouflage netting upon occupying a firing position is an example of a dynamic deception. "Adaptive deceptions are triggered like dynamic deceptions, but either the trigger or the ruse itself can be modified with experience. This category covers deception improved through trial and error."¹⁵⁵ Wearing cloths of local design in order to blend into crowd during a special reconnaissance mission is an

¹⁵² Chisholm and Feehan, *The Intent to Deceive*, 143 – 159.

¹⁵³ Gerwehr and Glenn, *Unweaving the Web*, 33.

¹⁵⁴ Gerwehr and Glenn, *Unweaving the Web*, 33.

¹⁵⁵ Gerwehr and Glenn, *Unweaving the Web*, 34.

example of adaptive camouflage. Premeditative deceptions display the greatest level of sophistication. “Premeditative deceptions are designed and implemented based on experience, knowledge of friendly capabilities and vulnerabilities, and, moreover, observations about the target’s sensors and search strategies.”¹⁵⁶ Complex deceptions, such as Operation FORTITUDE, are at the premeditative level of sophistication.

c. *Effect-Based*

Bell and Whaley in *Cheating and Deception* present an effect-based taxonomy of deception that categorizes deception by what the deception does. This taxonomy has two broad subdivisions: hiding and showing. Hiding deceptions seek to obscure indicators, and consist of masking, repackaging, and dazzling. Masking deceptions hide by blending the object into the background, as in camouflage. Repackaging deceptions hide the real by making the object appear as something innocuous, e.g., a bunker made to look like a food stand. Finally, dazzling seeks to confound the target about certain aspects of an object, such as using multiple radio transmitters to confuse the target of a unit’s true location. Showing deceptions seek to present misleading indicators to the target and consist of mimicking, inventing, and decoying. Mimicking deceptions recreate the characteristics of an object for advantage, such as using a company of soldiers to replicate a division. Inventing deceptions mislead via creation of new objects, as in notional documents. Decoying misleads by presenting alternate options as the actual option, such as the First U.S. Army Group being used to mislead German leadership as to the actual target of Operation OVERLOAD.¹⁵⁷

C. DECEPTION AND UNCERTAINTY

1. Uncertainty

Uncertainty is an unavoidable aspect of military operations. Despite the desires of every commander, a perfect understanding of the situation is impossible.¹⁵⁸ Among the

¹⁵⁶ Gerwehr and Glenn, *Unweaving the Web*, 35.

¹⁵⁷ Bell and Whaley, *Cheating and Deception*, 49 – 61.

¹⁵⁸ Indeed, the belief that a perfect understanding is even possible sets the stage for deception, whether self-inflicted or enemy induced.

phenomena creating uncertainty are inadequacy of collection channels, infiltration of noise corruption, and the fundamental inability to read the opponent's mind. The compounded result of these phenomena is an obscuration of the situation, as if a metaphorical fog had settled over the field. As Whaley states:

It ["the fog of war"] refers to the chaos of information inherent in the fast-breaking crisis of battle--the confusing muddle of delayed and mislaid messages, garbled and misunderstood orders, fragmentary and misinformed intelligence, pridefully exaggerated claims of successes and cringingly suppressed reports of blunders. In other words, "the fog of war" is the state of uncertainty resulting from the inability of a military information system to either accurately or speedily monitor the events of battle. The battle maps and situation reports become jangled representations of fiction and fact. The Commander neither knows what he knows nor can be certain of what he doesn't know. Crucial decisions about deployment, tactics, and strategy are made with the most fragmentary information.¹⁵⁹

Deception and uncertainty enjoy a complex relationship. The fog of war created by uncertainty provides the necessary environment for deception. If the enemy possessed perfect situational awareness deception would be almost impossible. Deception in turn can be used to either thicken the fog of war—increasing the target's uncertainty—or deception can be used to present a false parting of the fog—decreasing the target's uncertainty—by revealing vista of the deceiver's making. Deception used to increase uncertainty is often referred to as ambiguity increasing, or A-Type, deception. Deception used to create a false reduction of uncertainty is often referred to as misleading, or M-Type, deception.¹⁶⁰

2. A-Type Deception

A-type deceptions seek to increase the ambiguity of a situation so that the target becomes "...unsure as to what to believe."¹⁶¹ Ambiguity can be increased through the use of covering deception to obscure the real situation, through the use of active

¹⁵⁹ Whaley, *Stratagem* (1969), 257 – 258.

¹⁶⁰ Daniel and Herbig, *Propositions on Military Deception*, 5-7; Additionally, *FM 90-2*, 1988 calls M-type "misdirection." Headquarters, Department of the Army, *Field Manual 90-2*, 1988, 1-9.

¹⁶¹ Daniel and Herbig, *Propositions on Military Deception*, 5.

deception to present a number of reasonable alternatives to the real, or a mixture of both aspects. A-type deceptions can be attempted solely through the use of covering aspects, such as a unit camouflaging itself in a wood line. One of the goals of A-type deceptions is to cause the target to delay decision-making in the hopes of further information, thereby allowing the deceiver to seize or retain initiative. Another goal is to cause the target to spread their forces in an effort to cover every potential outcome, thus affording the deceiver the opportunity to achieve relative superiority at the point of decision.¹⁶²

3. M-Type Deception

M-type deceptions “...reduce ambiguity by building up the attractiveness of one wrong alternative.”¹⁶³ All M-type deceptions utilize covering deception to obscure the true situation, while using active deception to present the false situation. One goal of M-type deceptions is for the target to concentrate resources against the deception, allowing the deceiver opportunity to successfully conduct the true plan.¹⁶⁴ For example, the ambush of the Japanese fleet at Midway was facilitated by deceptive radio traffic which created the perception that Admiral Halsey’s fleet was still in the vicinity of the Solomon Islands.¹⁶⁵

D. THE WHY OF DECEPTION

1. Overview

As discussed previously, deception is not undertaken for the sake of deception; deception is conducted to drive the behavior of the target to achieve some benefit for the practitioner or some deleterious effect for the target. Four reasons are typically given for the use of deception: to achieve surprise, to gain freedom of action, to save lives, and to

¹⁶² Daniel and Herbig, *Propositions on Military Deception*, 5 – 6.

¹⁶³ Daniel and Herbig, *Propositions on Military Deception*, 6.

¹⁶⁴ Daniel and Herbig, *Propositions on Military Deception*, 6.

¹⁶⁵ Katherine Herbig, “American Strategic Deception in the Pacific: 1942-44,” *Strategic and Operational Deception in the Second World War*, ed. Michael Handel (New York, Routledge, 1987), 262 – 263.

mislead the enemy.¹⁶⁶ In addition to these reasons, there are four other reasons for attempting deception: to secure relative superiority at the point of decision, security, subversion, and mental isolation.

2. Surprise

Surprise is the most common reason cited for the use of deception. Surprise in the military context is defined as: “[striking] the enemy at a time or place or in a manner for which he is unprepared.”¹⁶⁷ There can be no question of the role of surprise in war; of 122 battles surveyed in Whaley’s classic study, the casualty ratio in battles without surprise was one-to-one; however, the casualty ratio where surprise was achieved was one-to-five in favor of the initiator.¹⁶⁸ Deception is the handmaiden of surprise as the secrecy necessary for surprise to succeed “...cannot be obtained by ‘saying nothing.’ Secrecy requires the systematic confusion and deception of the enemy.”¹⁶⁹

3. Freedom of Action

Deception can enhance freedom of action by decreasing the chance of enemy interference. Disguising movements of personnel, materials, and equipment as something innocuous can facilitate staging for future operations. Deceptions designed to prevent the target from interdicting lines of communication support freedom of action. Deception can also be used to assist the movement of key leaders. For example, President Roosevelt’s secret meeting with Prime Minister Churchill to hammer out the Atlantic Charter in the fall of 1941 was facilitated by a portrayal depicting the president as being on a fishing trip off Cape Cod.¹⁷⁰

¹⁶⁶ Jock Haswell, *The Tangled Web: The Art of Tactical and Strategic Deception* (Buckinghamshire, UK: John Goodchild Publishers, 1985), 23.

¹⁶⁷ Headquarters, Department of the Army, *Field Manual 3-0: Operations, Change 1*, A-3.

¹⁶⁸ Whaley, *Stratagem* (2007), 102 – 103.

¹⁶⁹ Erfurth, *Surprise*, no. 1, 33.

¹⁷⁰ James F. Dunnigan and Albert A. Nofi, *Victory and Deceit: Dirty Tricks at War* (New York: William Morrow and Company, Inc., 1995), 203 – 205.

4. Save Lives and Resources

Deception can be used to save lives and resources in three ways. First, through the achievement of surprise, gaining of freedom of action, and securing of relative superiority, deception can reduce the amount of fighting necessary to reach a decision, thus reducing casualties and material costs. Second, deception can be used to elicit surrender, thereby avoiding conflict all together. Nathan Bedford Forrest used a ruse involving a notional secret weapon to successfully elicit the surrender of four Union blockhouses during the Civil War.¹⁷¹ Finally, deception can be used in the retrograde to decrease the risk to the withdrawing troops. During the Korean War, 7th Division used the fact that the Chinese forces in the vicinity of Pork Chop Hill were conditioned to seeing armored personnel carriers resupplying U.S. forces on the crest of the hill. When the decision was made to withdraw the forces, rather than risk a night withdrawal, the forces were withdrawn using armored personnel carriers mimicking a supply run.¹⁷²

5. Mislead the Target

“Deception is by itself an asymmetric approach to warfighting: tricking the opponent into misapplying strengths and revealing weaknesses.”¹⁷³ A 1948 Department of Army memorandum on strategic and tactical cover and deception training provided ten specific examples of desired outcomes for deception operations (Table 3). These outcomes were divided into positive reactions—the target takes an action to its detriment—and negative reactions—the target fails to take an action to its detriment.

How deception can be used to mislead the target into not exploiting a weakness is illustrated by an example from the Vietnam War. A brigade commander was ordered to detach two battalions to support another operation, and the brigade commander realized that to do so would offer the Viet Cong an opportunity to exploit the reduction in forces

¹⁷¹ The Editors of the Army Times, *The Tangled Web: True Stories of Deception in Modern Warfare* (Washington, DC: R. B. Luce, 1963), 3.

¹⁷² U.S. Army Command and General Staff College, *Reference Book 31-40: Techniques for Deception* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1976), p6-9 to 6-10.

¹⁷³ Scott Gerwehr and Russell W. Glenn, *The Art of Darkness: Deception and Urban Operations* (Santa Monica, CA: RAND, 1999), 10.

in his area of operations. In order to support the requirement while preventing the Viet Cong from seizing the advantage, the brigade commander directed support personnel to portray the advance parties of another division while spreading the rumor that the portrayed division would be assuming control of the area of operations. The combination of the portrayal and the ruse caused the Viet Cong to go to ground, denying them the opportunity to exploit the brigade's temporary loss of maneuver forces.¹⁷⁴

| Positive reactions by target to deception |
|--|
| 1- Movement of reserves and their premature commitment to erroneous positions 2- Engagement by enemy in activities which exhaust his resources and/or prohibits their use elsewhere (i.e., extensive defensive preparations) 3- Dispersal or over-extension of enemy forces 4- Diversion of enemy thrusts 5- Disclosure of enemy positions |
| Negative reactions by target to deception |
| 1- Failure to move reserves to meet intended offensives 2- Failure to exploit our weaknesses 3- Failure of counterattack 4- Failure to disengage 5- Failure to locate and act against true positions of artillery, reserves, dumps, etc. |

Table 3. Examples of Target Responses to Deception.¹⁷⁵

6. Relative Superiority

Relative superiority is the “condition that exists when an attacking force... gains a decisive advantage over a larger or well-defended force.”¹⁷⁶ Deception, along with surprise and maneuver is an essential tool for gaining relative superiority.¹⁷⁷ Demonstrations and feints that draw away the defender's reserves from the point of decision assist in the achievement of relative superiority. The aspects of Operation FORTITUDE that caused the German command to retain forces in Pas de Calais even after the Normandy landing assisting in the Allies gaining and maintaining relative superiority

¹⁷⁴ U.S. Army Command and General Staff College, *Reference Book 31-40*, 6-12.

¹⁷⁵ Office of the Chief of Army Field Forces, *Strategic and Tactical Cover and Deception*, 13.

¹⁷⁶ William H. McRaven, *Spec Ops: Case Studies in Special Operations Warfare Theory & Practice* (Novato, CA: Presidio Press, 1995), 4.

¹⁷⁷ Headquarters, Department of the Army, *Field Manual 100-5: 1976*, 3-6 to 3-7.

at the Normandy beachhead. Use of deception to bait a superior force into an ambush is time honored technique used by inferior forces to gain relative superiority.

7. Security

Deception can be a vital asset for maintenance of security. “Real secrecy can only be achieved if, in addition to the correct information which the enemy receives, he is also provided with incorrect information. Confusion is the only effective method of maintaining secrecy.”¹⁷⁸ This is especially true for irregular warfare and intelligence operations. Deception in support of security typically relies heavily on camouflage and denial. In addition to the cover aspects, ruses in the form of cover stories and notional documents are used frequently. Status for cover and status for action are terms for the cover stories developed to protect intelligence operatives and facilitate their missions. MACVSOG utilized a set of cover stories for the overall organization, subordinate elements, and even missions in an effort to obscure its activities.¹⁷⁹ The cover for status of MACVSOG stated the organization was simply a special staff section focused on the comprehensive study of counterinsurgency operations, with no implementation authority.¹⁸⁰

8. Subversion

Subversion is defined as: “Action designed to undermine the military, economic, psychological, or political strength or morale” of a targeted organization.¹⁸¹ Deception can be used in a subversion role, by exploiting internal cleavages within the targeted organization in order to foment mistrust and discord. In addition to mistrust and discord,

¹⁷⁸ General Alfred Krauss as quoted in: Erfurth, *Surprise*, 6.

¹⁷⁹ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Appendix H Security, Cover & Deception* (Washington, DC: Joint Chiefs of Staff, 1970), accessed 2 September 2011.
http://www.dod.gov/pubs/foi/International_security_affairs/vietnam_and_southeast_asiaDocuments/520-18.pdf.

¹⁸⁰ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Appendix H Security, Cover & Deception*, H-10.

¹⁸¹ This definition is modified from the official definition by substituting targeted organization for regime in order to allow for targeting of non-state actors. Headquarters, Department of the Army, *Field Manual 1-02*, 1-178.

subversive deception can be used to introduce friction into the target's decision cycle and actions; thereby, reducing the overall effectiveness of the target.¹⁸² Subversion by deception may be particularly effective when used against organizations sensitive to internal threats; such as, networked terrorist groups and authoritarian regimes. MACVSOG's use of poison pen letters to increase distrust within the North Vietnamese leadership is an example of deception to achieve subversion.¹⁸³

9. Mental Isolation

Deception Mental isolation occurs when the target is unable to perceive or make sense of the situation.¹⁸⁴ The ultimate goal of mental isolation is to reduce the target to passivity or paralysis as the target is unable to appreciate or cope with the practitioner's actions.¹⁸⁵ Deception in support of mental isolation seeks to create an impenetrable fog of war through camouflage and denial, while increasing uncertainty and ambiguity by the presentation of conflicting information through what channels the target retains access to.¹⁸⁶ The effective mental isolation and subsequent paralysis of a target can negate the target's fighting power and thus ability to resist.¹⁸⁷ During the Six-Day War, Israeli Military Intelligence attempted a form of mental isolation against Arab forces. Operation FOG OF BATTLE "misled top enemy commanders, drew them into traps, diverted their forces in the wrong directions, spread confusion and chaos within upper level enemy headquarters, and speeded up the process of demoralization and disintegration of the channels of command."¹⁸⁸

¹⁸² Friction is defined as "the accumulation of chance errors, unexpected difficulties, and the confusion of battle." Headquarters, Department of the Army, *Field Manual 100-5*, 1986, 16.

¹⁸³ Richard H. Shultz, *The Secret War Against Hanoi : Kennedy and Johnson's Use of Spies, Saboteurs, and Covert Warriors in North Vietnam* (New York: HarperCollins, 1999), 136.

¹⁸⁴ John Boyd, "The Strategic Game of ? and ?" (Presentation, John Boyd Compendium, 1987), accessed 19 February 2012, <http://www.danford.net/boyd/strategic.pdf>, 36.

¹⁸⁵ Boyd, *The Strategic Game of ? and ?*, 47.

¹⁸⁶ Mao Tse-tung, "On the Protracted War " in *Selected Works of Mao Tse-Tung*, Vol. 2 (Peking: Foreign Language Press, 1965), 166.

¹⁸⁷ Basil Henry Liddell Hart Sir, *Strategy*, 2d rev ed. (New York: Meridian, 1991), 212.

¹⁸⁸ Leo Heiman, "War in the Middle East: An Israeli Perspective," *Military Review* 47, no. 9 (1967), 60.

E. COMMUNICATIONS PROCESS OF DECEPTION

1. Overview of Communications

In order to understand deception, it is necessary to look at the context in which deception is practiced. Of importance to the understanding of deception are the communications environment and the target's decision-making process. Roberta Wohlstetter's *Pearl Harbor: Warning and Decision* provides insight to the role of noise within the communications process. Wohlstetter defines noise as competing or contradictory signals that are useless for understanding a situation.¹⁸⁹ William Reese's "Deception within a Communications Theory Framework" presents an overview of communications theory that is critical to understanding the process by which information is transmitted from the practitioner to the target. Reese includes in his work the roles of channels and indicators; as well as, the ways by which errors enter the process.¹⁹⁰ Whaley and Bell's collaboration *Cheating and Deception*; as well as, Bell's "Toward a Theory of Deception" discuss how deception works through communication.

Deception occurs within the framework of communication (Figure 6). An actor is constantly emitting indicators of his actions, capabilities, and intentions into the environment, and is likewise constantly receiving indicators from other actors. Indicators travel from one actor to another via channels. Some indicators are not perceived by the target due to the lack of a viable channel to convey the information. Other indicators are corrupted by errors of encoding, transmission, or decoding. The corruption of indicators is a form of noise. The indicators an actor receives from other actors in the environment constitute another form of noise. The limited set of indicators that do reach the target are what the target relies on to form the perceptions of the practitioner for use in the target's decision-making process. Because the target does not have access to all the indicators of the practitioner, the target never has a complete picture of the actor's intentions, capabilities, and actions.

¹⁸⁹ Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford, CA: Stanford University Press, 1962), 3.

¹⁹⁰ William Reese, "Deception within a Communications Theory Framework," in *Strategic Military Deception*, eds. Donald C. Daniel and Katherine L. Herbig (Elmsford, NY: Pergamon Press Inc, 1982), 99 – 114.

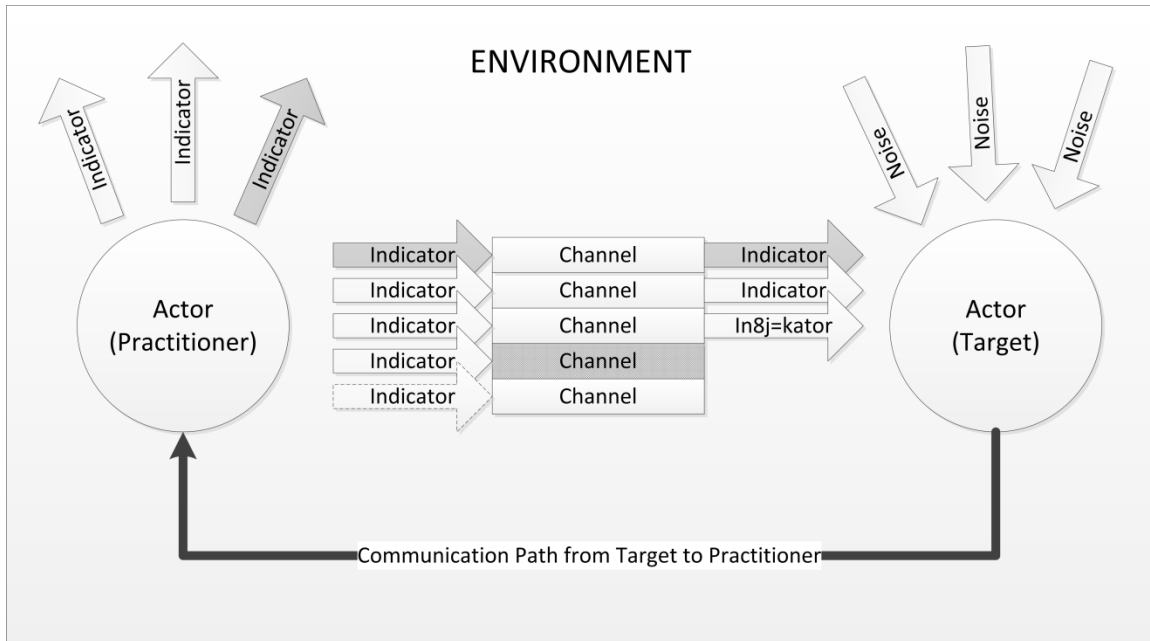


Figure 6. Communications Cycle

As Figure 6 shows, deception works within the communications process. The practitioner is constantly emitting indicators of his actions into the environment. Some indicators are not seen by the target as there is no channel to convey the indicator to the target. The white indicators represent indicators of the practitioner's true capabilities and intentions. The grey indicators represent deceptive indicators. The dashed line indicator represents an indicator obscured through cover means. The $I_{n8j=k}$ indicator represents an indicator corrupted by errors in encoding, transmission, or decoding. The cross-hatched channel is a channel closed through denial means. Finally, the noise arrows represent indicators from other actors or the environment that interfere with the target's perception of the practitioner's indicators. The process depicted is one-half of the complete communications process. There is a mirror process running from the target to the practitioner as indicated by the black arrow.

2. Indicators

Indicators are individual snippets of information about the capabilities, intentions, and actions of an actor created through the actor's interaction with the environment. Indicators can take myriad forms and include exercises and training events; personnel and

equipment movements; updates on social network sites and other communications activity; and solicitations for contracts.¹⁹¹ These pieces of information can be real or deceptive. The purpose of deceptive indicators is to provide the target with the information required for the target to draw the conclusion that the deception story is reality.

Indicators, whether real or notional, are subject to errors in encoding, transmission, and decoding. Errors in encoding occur at the origin of the indicator and may result from typographical or syntax errors, improper execution of guidance, and translation errors. For example, a notional identification document with an outdated stamp is an error in encoding. Errors in transmission alter the indicator as it transits a channel from the transmitter to the receiver and can occur due to noise causing corruption, interaction with the channel causing changes to the indicator, or the failure of the channel to pick up the indicator. Technical faults in the target's reconnaissance plane resulting in indicators of troop movements not being observed is an example of an error in transmission. Errors in decoding enter the indicator as it is being processed by the receiver, and can include mistakes in interpretation and failures in perception. An imagery analyst mistaking a tank for a truck is an error in decoding.¹⁹²

3. Channels

Channels are "the specific ways in which information about a given subject reaches an audience."¹⁹³ For deception, the most commonly used channel is the intelligence collection capabilities of the target. Intelligence channels consist of the suite of intelligence collection capabilities, e.g., human, signals, open source, and imagery. Examples of intelligence channels range from the double agents used by Britain in World War II as part of the Double Cross system to notional radio traffic.¹⁹⁴ In addition to

¹⁹¹ To reinforce the variety of indicators, one—possibly apocryphal—indicator of crisis planning at the White House is said to be late night pizza deliveries.

¹⁹² Reese, *Deception within a Communications Theory Framework*, 99 – 114.

¹⁹³ Godson and Wirtz, *Strategic Denial and Deception*, 19.

¹⁹⁴ Abram Shulsky, "Elements of Strategic Denial and Deception," in *Strategic Denial and Deception: The Twenty-First Century Challenge*, eds. Roy Godson and James J. Wirtz (Piscataway, NJ: Transaction Publishers, 2002), 19 – 26.

intelligence collection channels, there are many other channels for indicators to reach the target (Table 4). One of the goals of cover is to reduce the number of channels available to adversarial intelligence collection, as restricting channels makes the intelligence collection more dependent on the remaining channels, and reduces the likelihood of indicators of the actual plan reaching the target. Channels can be preexisting or created in support of the deception plan. The use of a corpse by British intelligence during WWII to convey notional plans to German intelligence is an example of a created channel.

| | |
|-------------------------|--|
| Intelligence | Human, Signal, Imagery, Measures, Electronic |
| Traditional Media | Newspapers, Radio, Television, Handbills, Leaflets, Loudspeakers |
| Internet | Social Media Sites, Commercial Email, Notional Sites |
| Military Communications | Radio, Official Email, Orders, Radar |
| Diplomacy | Negotiations, Communiques, Official statements |
| Other | Word-of-mouth, Surveys, Telephone |

Table 4. Examples of Channels

4. Deception's Role in the Communications Process

In addition to deception operating within the communications framework, deception affects the communications process itself on a number of levels. Indicators can be camouflaged to prevent the target from recognizing the indicators. Alternatively, indicators can be reduced through various security measures. Channels can be closed off via denial capabilities. For indicators that cannot be hidden from the target by cover tools, simulations and portrayals can be used to drown the indicator in a sea of noise.

F. DECEPTION AND TARGET DECISION-MAKING

To understand how deception affects the target, it is imperative to understand how decisions are made. Decision-making is not a rigid process of whereby two individuals can see the same indicator, reach the same conclusion, and act the same way; rather, decision-making is subject to numerous schemata—cultural, personal, and cognitive—the

composite of which is unique to every individual. Colonel John Boyd's "Organic Design for Command and Control" introduces a framework for the decision-making process, the Observe-Orient-Decide-Act (OODA) loop.¹⁹⁵ The OODA places decision-making in an iterative process where perceptions are created by the synthesis of new information and existing perceptions through the schematic lenses. From the revised perceptions, decisions are made, driving actions and inaction. While Boyd includes the lenses in his decision-making framework, he does not go into depth discussing how culture, personal experiences, and genetic heritage impact decisions.

Richard Heuer's *Psychology of Intelligence Analysis*, though intended as a tool for intelligence analysts contains a trove of information for the deception practitioner. Of particular use is Heuer's discussion of cognitive biases. Cognitive biases are defined by Heuer as "mental errors caused by our simplified information processing strategies... a cognitive bias does not result from any emotional or intellectual disposition towards a certain judgment, but rather from subconscious mental procedures for processing information."¹⁹⁶ Heuer categories the cognitive biases by their effect on intelligence analysis: "evaluation of evidence, perception of cause and effect, estimation of probabilities, and retrospective evaluation of intelligence reports."¹⁹⁷

Michael Bennett and Edward Waltz's *Counterdeception Principles and Applications for National Security* expands the discussion of biases by adding three additional categories: personal, cultural, and organizational. Personal biases "are the result of personality traits and the firsthand experiences that affect a person's world view throughout the course of their life."¹⁹⁸ Cultural biases are "the result of interpreting and judging phenomena in terms particular to one's own culture and is influenced by the knowledge, beliefs, customs, morals, and habits, and cognitive styles that are acquired as

¹⁹⁵ John Boyd, "Organic Design for Command and Control," (Working Paper, 1987), accessed 19 February 2012, <http://www.danford.net/boyd/organic.pdf>.

¹⁹⁶ Richards J. Heuer Jr., *Psychology of Intelligence Analysis* (Reston, Virginia: Pherson Associates, LLC, 2007), 111.

¹⁹⁷ Heuer, *Psychology of Intelligence Analysis*, 112.

¹⁹⁸ Michael Bennett and Edward Waltz, *Counterdeception Principles and Applications for National Security* (Norwood, MA: Artech House, Inc., 2007), 73.

a member of one's specific social environment.”¹⁹⁹ Organizational biases are “the result of the goals, mores, policies, and traditions that characterize the specific organization in which the individual works.”²⁰⁰ Bennett and Waltz's expansion of biases increases the number of potential levers a deception practitioner has to influence the deception target-

In order to explore how deception affects the target, an expanded version of the OODA process is used to represent the target's decision-making process. The OODA process consists of four interconnected phases: observe, orient, decide, and act (Figure 7)

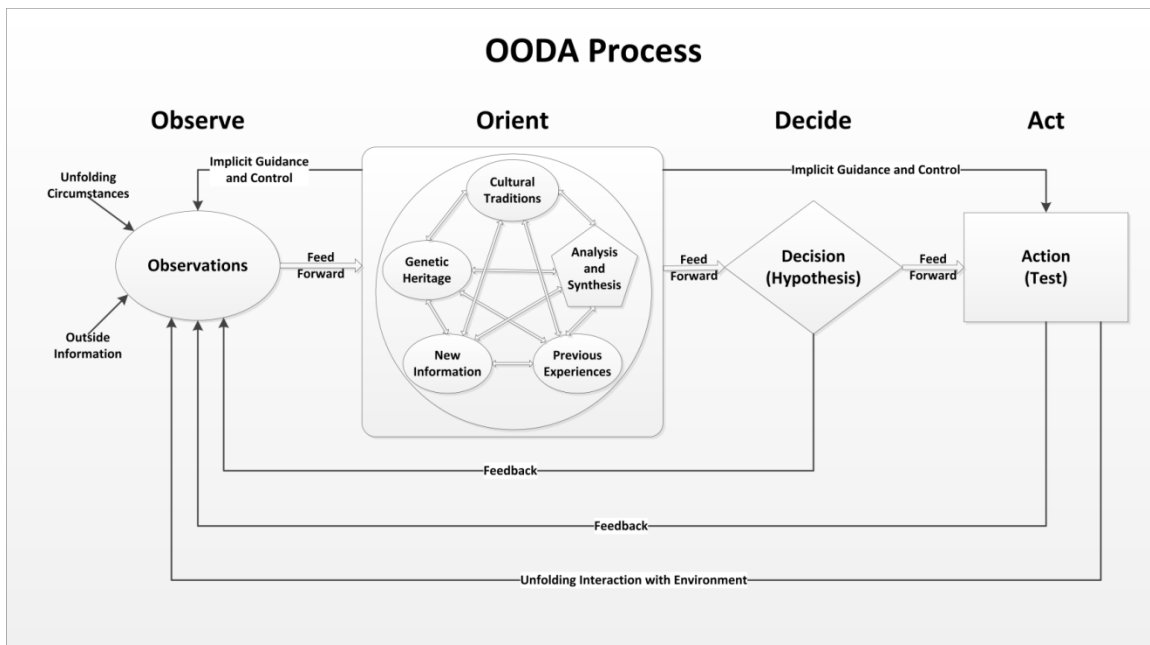


Figure 7. Expanded OODA Process (From: ²⁰¹)

1. Observe

During the observe phase, the target interacts with the environment, actively and passively collecting indicators in an effort to gain an understanding of the situation. Despite the wishes of every actor, it is impossible to collect a perfect picture of the situation as some indicators are missed and others corrupted by transmission and coding

¹⁹⁹ Bennett and Waltz, *Counterdeception Principles*, 72.

²⁰⁰ Bennett and Waltz, *Counterdeception Principles*, 74.

²⁰¹ Robert Coram, *Boyd: The Fighter Pilot Who Changed the Art of War* (New York, NY: Back Bay Books, 2002), 344.

errors. The inability to perceive the total picture is the “fog of war.” Additionally, the target’s existing perceptions of the environment and situation affect which indicators the target observes.²⁰² As Thomas Kuhn states: “What a man sees depends both upon what he looks at and also upon what his previous visual-conceptual experience has taught him to see.”²⁰³ It is during the observation phase the deception practitioner interacts with the target. Through camouflage, indicators of friendly activity are obscured from target collection. Furthermore, through denial, target collection channels are closed off, preventing the collection of unobscured indicators—both friendly and other actor. Finally, through active deception, manipulated or manufactured indicators are presented for collection, which taken together tell the deception story. Through these means, the fundamental effects of deception in the observe phase are to either thicken the fog of war by increasing ambiguity or uncertainty by obscuring indicators, or to part the fog of war by seeming to decrease ambiguity or uncertainty through the presentation of indicators revealing a misleading picture of the situation. It is necessary to understand the collection capabilities of the target in order to increase probability of reception of the manipulated indicators; as well as, to prioritize camouflage and denial activities towards protecting vulnerable indicators. Equally important is an understanding of what the target expects to see from the practitioner; in other words, the practitioner needs to develop a detailed understanding of self through the lens of the target.

2. Orient

After the observe phase, the target transitions to the orient phase. During the orient phase, the target processes the collected indicators through a series of schemata and synthesizes the result with the target’s existing perceptions to create revised perceptions of the environment and situation. Schemata are defined as: “...the dynamic, cognitive knowledge structures regarding specific concepts, entities, and events used by

²⁰² Heuer, *Psychology of Intelligence Analysis*, 8 – 10.

²⁰³ Thomas Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: University of Chicago Press, 1996), 113; This is an important point; an engineer, infantryman, and helicopter pilot looking at a wooded glen will *see* different things. The engineer may see the glen in terms of soil substrate suitability for a road; the infantryman may see the glen in terms of cover, concealment, and avenues of approach; while the pilot sees in terms of potential landing zones.

individuals to encode and represent incoming information efficiently.”²⁰⁴ These schemata create biases in the way the target perceives and processes information. Schemata can be categorized as cultural, personal, and genetic. Cultural schemata include the collective experiences, legacies, biases, and heuristics developed by organized groups. Personal schemata include personal experiences and the resultant biases and heuristics. Genetic schemata include the cognitive biases and heuristics developed through conflict based natural selection. Schemata and the resultant biases can both aid and hinder deception efforts.

a. Cultural Schemata

Cultural schemata are the collective set of knowledge, beliefs, experiences, values, and norms for a distinct aggregate of people with similar characteristics, e.g., state, ethnic group, region, religion, and organization. A target can be influenced by several different sets of cultural schemata, for example, a Sunni Muslim Iraqi Kurd is influenced by the schemata for his Sunni Islam, Iraqi, and Kurdish aspects. While members of a particular culture are not perfectly uniform in their cultural schemata, understanding the culture of the target is vital to the success of deception. Culture can be a source of trappings for a deception to increase its legitimacy, for example, the Sacred Sword Patriots League deception in Vietnam was based in a Vietnamese legend of a divine sword given to a prince to drive out the occupying Chinese.²⁰⁵ Additionally cultural biases can impact the credibility given to different channels. For example, in a country without a tradition of free press, there may be less credibility given to traditional media channels. Likewise, in societies with a strong oral tradition; such as Arab societies, word of mouth channels may have higher credibility than in societies without a strong oral tradition. Understanding the degree to which a culture values certain channels can help in deciding which channels to priorities for exploitation or denial.

²⁰⁴ Hazel Markus, "Self-Schemata and Processing Information about the Self," *Journal of Personality and Social Psychology* 35, no. 2 (1977), 63 – 78. as cited in Stanley G. Harris, "Organizational Culture and Individual Sensemaking: A Schema-Based Perspective," *Organization Science* 5, no. 3 (August, 1994), 310.

²⁰⁵ Shultz, *The Secret War Against Hanoi*, 139 – 140.

Much like the social groups, organizations possess a distinct set of schemata that influence information processing. These schemata in turn generate organizational biases. An example of an organizational bias with applicability to deception operations occurred in the Burma Campaign of World War II. The Japanese command in Burma did not trust its intelligence analysts. British efforts to deceive the Japanese commander failed because of this bias against the intelligence analysts, the deception indicators presented by the British never impacted the Japanese commander's decisions.²⁰⁶ A second example of organizational schemata impacting deception, this time to negative results, occurred as part of British plans to invade Italian controlled Abyssinia [Ethiopia]. The British plan called for an attack into northern Ethiopia, and a deception to make it appear the attack would come from the south. The British successfully deceived the Italians into believing the attack would come from the South; however, the British failed to account for the Italian Army's desire to avoid combat. Rather than reinforcing the southern approaches to repulse the perceived British offensive, the Italians withdrew northward, towards the actual British offensive.²⁰⁷ [This episode led to Dudley Clarke's admonishment to plan deception in terms of the target's actions, and not the target's perceptions]

b. Personal Schemata

Whereas the cultural schemata are the result of the social environment, personal schemata are the result of the one's experiences, motivations, and emotions. Four variables impacting the degree to which an experience might affect an individual's worldview: whether the experience was first hand; how early the event occurred in the individual's life; how important the consequences of the event were to the individual or his nation; and whether the individual has a sufficient range of experience to develop alternative perceptions.²⁰⁸

²⁰⁶ Dewar, *The Art of Military Deception in Warfare*, 10.

²⁰⁷ Dudley Clarke, 6 September 1972, "Some Personal Reflections on the Practice of Deception in the Mediterranean Theatre from 1941 to 1945," memorandum included in David Mure, *Master of Deception: Tangled Webs in London and the Middle East* (London: William Kimber & Co. Limited, 1980), 273.

²⁰⁸ Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976), 239.

Within the context of deception, personal create exploitable vulnerabilities. For example, the paranoia of Stalin about internal security threats created a vulnerability which German intelligence exploited by creating a set of notional dossiers detailing Soviet officers' interactions with German intelligence officers. In a brilliant move, the dossiers were not created from scratch; rather Abwher used dossiers from an actual episode of German-Soviet military cooperation in 1927 as the basis for the notional dossiers. By modifying existing documents, Abwher managed to expediently create dossiers with an air of believability—the best deceptions are built on truth. While it cannot be proven the deception led to the subsequent purge by Stalin of not only the officers in the dossiers, but over 20,000 personnel, including a majority of senior leaders, the timing would seem to indicate a connection. The decimation of the Soviet armed forces during the 1937–1939 purge significantly reduced the effectiveness of the Soviet armed forces prior to Operation BARBAROSSA.²⁰⁹

c. Cognitive Biases and Heuristics

Cognitive biases and heuristics are what the OODA loop considers to be genetic heritage; that is cognitive biases and heuristics have developed through natural selection. There are many cognitive biases and heuristics; the ones most pertinent to deception are: small numbers, anchoring, confirmation, Rubicon, and availability.

Small numbers bias, also known as representativeness, is the tendency to overestimate the reliability of a small sample to be representative of the total set. Furthermore, this bias creates overconfidence in observed patterns and early trends. Taken together, this means that the perceptions of individuals are created by a smaller set of information than is thought.²¹⁰ Deception benefits from the small number bias by lessening the number of indicators needed to generate the required perception. However, the small numbers bias also increases the difficulty of shifting initial perceptions.

²⁰⁹ Edward Epstein, *Deception: The Invisible War between the KGB and the CIA* (New York, NY: Random House Value Publishing, 1991), 140 – 143.

²¹⁰ Amos Tversky and Daniel Kahneman, "Belief in the Law of Small Numbers," *Psychology Bulletin* 76, no. 2 (1971), 105 – 110.

Anchoring heuristic also impacts how an individual adjusts an existing perception based on new information. There is a tendency for the starting perception to act as friction on any adjustments so that the adjusted perception may be closer to the starting position than appropriate.²¹¹ Anchoring's importance to deception is twofold. First, anchoring reinforces the maxim that deceptions should use the target's existing perceptions. Second, anchoring indicates a need to ensure when deception is in support of a specific plan that the deceptive indicators are transmitted before indicators of the actual plan begin transmission.

Confirmation bias exhibits itself in the tendency of individuals to interpret new information in ways supportive to the individual's established perceptions.²¹² Confirmation bias is one reason why deceptions that exploit existing target perceptions are preferable to deceptions that seek to change target perceptions. Additionally, confirmation bias is another reason to seek to implement deception prior to the target forming its initial perceptions. If the initial perceptions are formed relying on deceptive indicators, then confirmation bias will generally work to support the deception.

Rubicon bias is the tendency of individuals to place greater confidence in a decision once the decision is made. Prior to making a decision, an individual tends to evaluate the benefits, costs, and risks of the various options in reasonably deliberative manner—subject to the lenses of personal experience and other biases and heuristics. However, once a decision is made, the individual tends to view that decision as being the best possible decision.²¹³ Along with confirmation bias, the Rubicon bias suggests that deceptions should seek to leverage existing perceptions; rather than seeking to create new perceptions.

The availability heuristic expresses itself in the tendency of a person to evaluate the likelihood of an event based on "...the ease with which they can imagine

²¹¹ Heuer, *Psychology of Intelligence Analysis*, 150 – 151

²¹² Thomas Gilovich, *How We Know What Isn't So* (New York: The Free Press, 1991), 33.

²¹³ Dominic Johnson and Dominic Tierney, "Crossing the Rubicon: The Perils of Committing to a Decision" (Cambridge, MA: Belfer Center for Science and International Affairs, Harvard Kennedy School, 2011).

relevant instances of the event and the number or frequency of such events that they can easily remember.”²¹⁴ In addition to recall, the availability heuristic also depends on the ability of a person to imagine an event. The availability heuristic impacts deception on several levels. First, since successful deceptions are often related to significant events, the availability heuristic can cause the perception of deception where none exists. Next, since the availability heuristic relies on recall and imagination, deception can be used to reduce or increase the perceived probability of an event. Finally, since the availability heuristic utilizes the probable, deception can be used to protect the unexpected by providing plausible explanations; for example, protecting human agents by attributing collected information to signals intelligence assets.

d. Results of Orientation

The results of the orient phase are revised perceptions of the situation and environment that are fed into the decide phase. Gaps in information identified during the analysis and synthesis can result in new requirements for the observe phase. Additionally, the revised perceptions impact how the expectancy bias affects the collection of new information. Successful deception corrupts the outputs of the orientation phase causing the target to perceive the situation as the deceiver intends.

3. Decide

Once the indicators are synthesized and analyzed, and the target’s revised perception of the situation is created, the process transitions to the decide phase. During the decide phase, the target uses his perception to develop his courses of action. This phase marks the transition of the target from a deliberative mind-set to an implementation mind-set.²¹⁵ In addition to the decide phase feeding forward into the act phase, feedback from the decision phase feeds back into the observe phase as new information requirements.

²¹⁴ Bennett and Waltz, *Counterdeception Principles*, 102.

²¹⁵ Johnson and Tierney, “Crossing the Rubicon,” 1.

4. Act

Finally, the chosen courses of action are implemented. These activities create indicators via interaction with the environment. It is at this point a successful deception plan reaches fruition through the target's implementation of the decided actions or inactions based on the manipulated perception. If the deception story is accepted and acted upon, there should be evidence in the indicators created by the target's activities. While indicators of successful deception are important, equally as important are indicators of deception failure; the deception practitioner should seek to collect indicators looking for feedback that the deception did not work.

G. DECEPTION PROCESS

1. Bell and Whaley

Bell and Whaley present the deception process as a deception planning loop that begins with the development of a desired deception goal in support of the strategic goal. The first half of the loop is the decision sector where the potential stratagem, illusion, channel, ruse, and characteristics are considered. The second half of the loop, the perception sector, executes the characteristics to drive the ruse through the selected channel in order to generate the intended illusion to activate the chosen stratagem to achieve the deception goal²¹⁶ (Figure 8). Bell and Whaley's process is demonstrated using their example from *Cheating and Deception* in figure 9. Bell and Whaley's deception planning process is thorough, but falls short of its potential. One key shortcoming is that the process ends with what the target thinks, rather than what the target does. This runs the risk of the target thinking what the deceiver desires, but not acting in the desired way.

²¹⁶ Bell and Whaley, *Cheating and Deception*, 71.

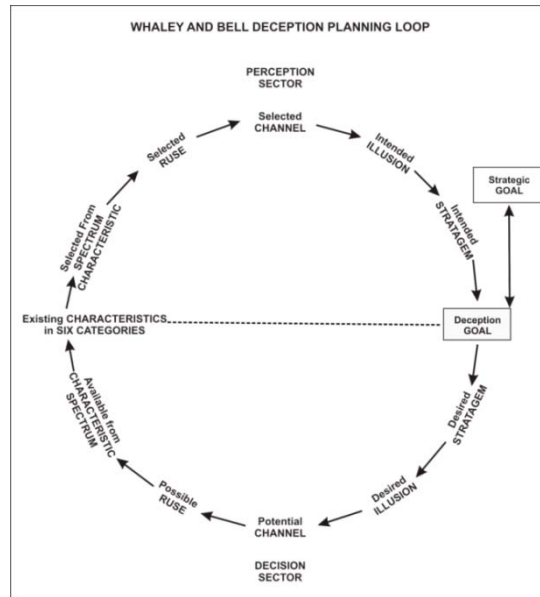


Figure 8. Bell and Whaley's Deception Planning Loop (From: ²¹⁷)

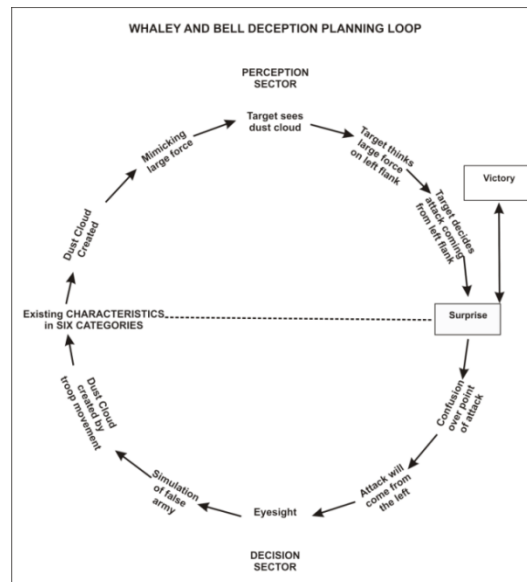


Figure 9. Example of Bell and Whaley's Deception Planning Process in Action (From: ²¹⁸)

²¹⁷ Bell and Whaley, *Cheating and Deception*, 71.

²¹⁸ Bell and Whaley, *Cheating and Deception*, 70 – 72.

2. See-Think-Do

An alternate deception process is articulated in *Joint Publication 3-31.4: Military Deception*. JP 3-13.4 utilizes a three step deception process: See-Think-Do. In the See-Think-Do model, the deception practitioner first decides what action or inaction the target must do in order to support the overall plan. This behavior becomes the deception objective. Next, the practitioner considers what the target must think in order to cause the deception goal. Finally, the practitioner formulates what the target must see in order to create the necessary perceptions to drive the target's thoughts. The set of indicators the target needs to see becomes the deception story.²¹⁹ While this process offers a direct, to the point, tool for deception planning, the model oversimplifies the complexities of target decision-making.

3. Revised Deception Process

Merging Bell and Whaley's deception planning loop together with the See-Think-Do process in the context of the communication and decision-making frameworks provides a potentially fuller understanding of the deception process (Figure 10) The process starts with the identification of a strategic, operational, or tactical objective, e.g., establish a beachhead on the mainland of Europe. From this objective a deception objective is derived, e.g., German forces reinforce Pas de Calais, leaving Normandy thinly defended. Potential deception objectives must be feasible, that is, the target must be capable of performing the action or inaction, and the action or inaction must be reasonable. Once the deception goal is determined, the next step is to evaluate what the target must think in order to drive the desired action, e.g., Pas de Calais is the Allied objective. This phase corresponds to the orient and decide stages of the OODA process. Critical to the determination of what the target needs to think is the knowledge of what the target already thinks; as well as, what cultural, organizational, and personal schemata influence the target's decision-making. In the case of the example, knowing the Germans already viewed Pas de Calais as the likely landing zone greatly aided the deception

²¹⁹ Joint Staff, *JP 3-13.4: Military Deception*, (Washington, DC: Department of Defense, 2006), pIV-1 to IV-2.

process. Likewise, had this phase revealed the Germans viewed Normandy as the most probable target the entire deception, and in deed the entire plan, would have to be reevaluated.

After the desired perception is decided, then the set of indicators necessary to create the perception must be designed, e.g., feints in the form of bombing and reconnaissance flights over Pas de Calais; disinformation through DOUBLE CROSS system; and simulated Allied forces staging across the English Channel from Pas de Calais. This set of indicators is what will paint the deception picture for the target to see. Again it is vital to understand what the target already perceives, as the existing perception not only drives how new indicators are interpreted through filters like the expectancy and confirmation biases, but also what the target sees the indicators as. Additionally, the channels available for the target to receive indicators must be identified, and of those channels which will be denied the target. Finally, based on the analysis of the available channels, and the indicators needed for the deception story, a prioritized set of indicators of the actual plan lays out what must be hidden from the target. In the example, many of the indicators of the Normandy Invasion did not contradict the Pas de Calais deception, and thus did not need to be covered; such as, the airborne training operations, and the general build up of materials and personnel. This allowed cover efforts to focus on protecting critical indicators like the Mulberry harbors. Once the deception plan is implemented, collection of enemy indicators is essential. These indicators help the deceiver to determine if the deception succeeded or more importantly if it failed.

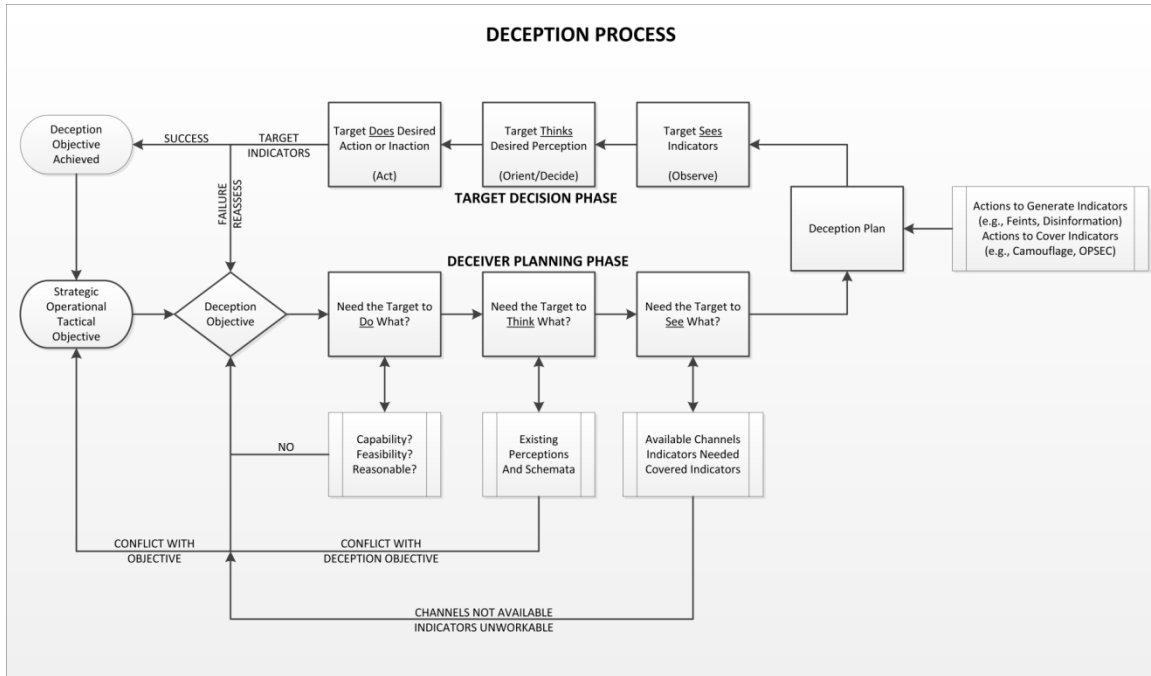


Figure 10. Revised Deception Process

V. PRACTICE OF MILITARY DECEPTION

I feel that deception and cover plans or operations are fully justified and that the employment of cover and deception should . . . be an accepted and organized procedure for any campaign.

– General George S. Patton²²⁰

FM 90-2: Battlefield Deception provides a five-step deception planning process. Step one—situation analysis—focuses on friendly and enemy situations, target analysis, and a stated desired situation. Step two—deception objective formulation—consists of determining the five w’s of the deception objective: what action/inaction is necessary to achieve the desired situation; who must perform the action/inaction; when and where must they act; and who must be affected. Step three—desired perception—develops an idea of what the enemy must think to make him act in the desired manner, and what perceptions must be created in order to persuade the enemy to think in the desired way. Step four—deception story—generates the information that when conveyed to the target paints the perception picture for the target. Step five—deception plan—focuses on producing the overall plan for how to convey the necessary information to the enemy, as well as the recommending the intelligence requirements to look for indicators that the plan is working or not.²²¹

FM 3-13: Information Operations provides a five-step deception planning process designed to nest within the Army’s military decision making process [MDMP]. The steps to the process as outlined in *FM 3-13* are: receipt of the mission; mission analysis; course of action development; course of action analysis, comparison, and approval; and orders production. Though the names are different than the steps in *FM 90-2*, the processes within the steps are very similar. In addition to the planning process, *FM 3-13* provides guidance on the preparation, execution, and assessment of the deception plan. Interestingly, the initial iteration of the information operations field manual, *FM 100-6*, published in 1996, did not contain a discrete deception planning process.

²²⁰ Quoted in Center for Army Lessons Learned, *CALL Bulletin* 3-88, 7.

²²¹ Headquarters, Department of the Army, *Field Manual 90-2: Battlefield Deception*, 4-4 to 4-15.

JP 3-13.4: Military Deception, provides a six-step deception planning process based on the Joint Operation Planning and Execution System [JOPES]. The six steps are: deception mission analysis; deception planning guidance; staff deception estimate; commander's deception estimate; deception plan development; and deception plan review and approval.²²² The content of these steps is similar to the steps in *FM 90-2* and *FM 3-13*, with the addition of the SEE—THINK—DO methodology.

In addition to the preceding examples of doctrinal deception planning, there is a vast body of official and unofficial research addressing the planning and practice of deception. Exemplars of the official research include the CIA Deception Research Program's *Deception Failures, Non-Failures and Why* and *Deception Maxims: Facts and Folklore*; the U.S. Army Research Institute for the Behavioral and Social Sciences' *Doing Deception: Attacking the Enemy's Decision Processes*; and Hans von Greiffenberg's *Deception and Cover Plans Project #29*, which analyzes German deceptions during World War II. Representative of the unofficial research is Benjamin Higginbotham's "On Deceiving Terrorists," which looks at using deception against non-state actors.

Finally, there are a number of historic accounts of deception planning and execution to draw from, with much of the work covering the World War II era. For example, Roger Hesketh's *Fortitude* represents the official history of the London Control Section's pinnacle operation. Similarly, the *Official History of the 23rd Headquarters Special Troops* details the unit's creation and conduct of tactical deception in the European Theater of Operations. David Mure's *Master of Deception* covers Dudley Clarke's A-Force in North Africa, and includes a memo from Clarke outlining his thoughts and observations on deception. Anthony Cave Brown's *Bodyguard of Lies* is a massive tome covering nearly the totality of Allied deception, espionage, and clandestine operations in the European Theater of Operations. The critical value of these works is their discussion of deception in real world application—outside the realm of theory.

²²² Joint Staff, *JP 3-13.4*, IV-3.

A. DECEPTION PLANNING PROCESS

The 2012 edition of JP 3-13.4 utilizes a six-step process for planning deception: deception mission analysis, deception planning guidance, staff deception estimate, commander's deception estimate, deception plan development, and deception plan review and approval.²²³ This planning process will serve as the framework for the discussion of deception planning, with modifications derived from other works.²²⁴

1. Mission Analysis

The current U.S. military guidance on planning military deception has the military deception process overlaid on either MDMP or JOPES planning processes. This is not sufficient. Aspects of military deception planning must occur before the beginning of formal planning, and ideally the introspective analysis of friendly forces should be a continuous process even prior to receipt of a mission. For example, development of profiles of potential target leaders must be integrated with ongoing intelligence preparations, so that when the planning process begins this vital groundwork is already in place. Additionally, a firm understanding of friendly force indicators is necessary in order to plan on how to cover critical indicators; as well as, determining what indicators are necessary to create the perception of particular activities, e.g., the indicators created by pre-deployment preparations. These friendly force indicators should be collected and analyzed during routine garrison operations, field training, and actual missions.

a. Information Requirements

Information requirements for deception operations are complex, but not overwhelming. "In developing such [deception] plans the commander must visualize and understand the enemy viewpoint...."²²⁵ As *TC 30-1* states:

²²³ Joint Staff, *JP 3-13.4*, IV-4 to IV-14.

²²⁴ This discussion is not meant to prescribe the way to plan and execute deception operations; rather, this section is meant as a discussion of the broad concepts associated with planning and execution.

²²⁵ Headquarters, Department of the Army, *FM 100-5: 1962*, 50.

Success of cover and deception is dependent on the ability of the deceiver to predict the probable enemy reaction. The staff charged with the deception planning must be able to think as the enemy does and not react as a friendly commander transplanted into the enemy situation. This is possible only as a result of a thorough understanding of the enemy, his culture, and military system. The enemy intelligence system must be evaluated because this system is the vehicle that carries the deception story to the enemy commander. Determination must be made regarding the enemy's characteristics, his habits that make him vulnerable to deception, and those aspects that present the least likely deception target. ...if possible, we should know the characteristics of the enemy commander, to include the degree of freedom allowed subordinates, his reaction time to new situations, and how this fear of the unknown influences his actions. A single known characteristic of a commander is more important than the entire statistical record of his military career.²²⁶

Note, while *TC 30-1* talks in terms of the “enemy commander,” it is important to realize when targeting non-hierarchical organizations such as networked non-state actors, the target may not be a “commander;” rather, the target may be someone like a low level leader, key financier, or technician. Additionally, the target may not be an “enemy” at all. As stated previously, enemies, adversaries, neutral parties, and even friendly parties are viable targets of deception, though the risk versus benefit calculations when looking to deceive neutral and friendly parties must be examined closely.

The practitioner must also have knowledge of the channels available for both real and deceptive indicators to reach the target; as well as, what channels are available for the collection of feedback in order to assess the deception operation's effectiveness. The deception practitioner should take every effort reasonable within the constraints of time and resources to develop a full understanding to the target. Fortunately, there are several products generated by others which are useful in the practitioner's analysis (Table 5).

²²⁶ Headquarters, Department of the Army, *Training Circular No. 30-1*, 15

| Element | Product |
|------------------------------|---|
| Intelligence | Intelligence Estimate Intelligence Summaries Intelligence Preparation of the Battlefield Network Link Analysis Counterintelligence Threat Analysis [CITA] High Value Individual Target Packets |
| Civil Military | ASCOPE Analysis CMO Estimate |
| Military Information Support | Target Audience Analysis Worksheets [TAAW] MISO Estimate |
| OPSEC | Critical Information OPSEC Indicators |
| Chaplain | Religious Assessment |
| Interagency | Country Studies Key Leader Profiles |
| Commercial Databases | Open Source Information |

Table 5. Sample Deception Planning Resources

Not only must the practitioner understand multiple targets' personal characteristics, organization, and culture, the practitioner must also know his own organization in order to have a firm grasp of the indicators the organization generates, specifically the indicators comprising critical information. Critical information is the set of indicators that if pieced together could reveal the friendly force plans, capabilities, and intentions. The list of critical information should normally be produced by the OPSEC officer. A thorough knowledge of friendly forces is required as well for effective portrayals and simulations. One of the critical tasks for the 23rd Headquarters Special Troops was the reconnaissance of friendly formations. The signals units collected "...an unequalled library of combat [Standard Operating Procedures], [Signal Operating Instructions], and radio peculiarities." Likewise, the 603rd Combat Engineers studied unit "atmospherics" and collected samples of unit patches, command post signs, and bumper markings to facilitate the impersonation of any unit in the 12th Army Group.²²⁷

The degree to which a practitioner needs to understand his own unit means this requirement cannot wait for a specific mission. Ideally, the practitioner's estimate of the

²²⁷ *Official History of the 23rd Headquarters Special Troops* (Photocopy from National Archives), 9.

friendly forces should be a continuous process, carried out in garrison, training, and actual operations. For this, military deception planning must also be continually nested with operations security planning. Understanding the myriad indicators an element on the move generates, prior to the start of formal mission planning, allows the military deception planner to implement early in the process the necessary cover plans to mask real indicators and the necessary deception plans to show the required false indicators. Waiting until the beginning of the formal planning process to start will result in delays that could allow the indicators of the real plan to be received by the target before the military deception plan is even implemented.

All the information is compiled into a deception estimate. Drawing from various sources, suggested elements of the deception estimate include:

- Potential target decision makers, to include biographical data and psychological profiles
- Existing preconceptions about friendly plans, capabilities, and intentions
- Target organization for systems of decision-making, information flow, and command and control; as well as, organization structure
- Target intelligence capabilities in order to identify channels
- Target potential plans, capabilities, and intentions
- Friendly force plans, capabilities, and intentions to identifying indicators
- Friendly force critical information
- Friendly force characteristics; such as, unit designations, leaders, insignia²²⁸

2. Planning Guidance

Deception planning guidance from the commander should focus on the deception goal: what the commander wants the target to do, or not to do. Identification of the deception goal must be accomplished as early as possible in the planning process so that the deception plan has sufficient preparation and execution time to allow the target opportunity to take the desired action prior to the execution of the actual plan.²²⁹

²²⁸ Headquarters, Department of the Army, *Training Circular No. 30-1*; Joint Staff, *JP 3-13.4*; *Official History of the 23rd Headquarters Special Troops*.

²²⁹ Headquarters, Department of the Army, *Training Circular No. 30-1*, 13.

Part of the planning guidance is an analysis of the risks and benefits for the various aspects of deception. Deception should be considered for all operations, and cover aspects always implemented, as FM 100-5 (1954) states: “...deception is a continuing action carried out by all echelons of command in activities such as cover and concealment, individual combat, use of dummy positions and installations, and decoys.”²³⁰

There are situations where active deception may not be appropriate, or where deception should focus on supporting operations security and force protection instead of offensive operations. *Reference Book 31-40* recommends the following questions be considered in order to determine whether active deception should be implemented:

- Is the... situation such that the [target] is susceptible to deception?
- Is there a logical opportunity for deception?
- Are there resources, to include time, available to support the deception?
- Is the [target] likely to react in the desired manner in this situation?²³¹

The final decision on when and how to implement deception rests with the commander.

3. Planning Methodology

a. DO

With the deception objective identified, the next step is the development of the deception story. The story should be developed using the SEE—THINK—DO methodology.²³² Backwards planning with this methodology starts with the DO step. This step takes the deception objective and couples it with a specific target. The result is phrased in terms of what the specified target does or does not do—this correlates to the act phase of the OODA decision-making process discussed in Chapter IV. For example, a deception objective might be: “Republican Guard commander keeps his forces in vicinity of Kuwait City.” The deception objective must be evaluated in terms of capability, reasonability, and feasibility. If these criteria are not met then the deception objective or

²³⁰ Headquarters, Department of the Army, *FM 100-5: 1954*, 38.

²³¹ U.S. Army Command and General Staff College, *Reference Book 31-40*, 1-2.

²³² Joint Staff, *JP 3-13.4*, IV-1 to IV-2.

target needs to be reassessed. For example, the target of the deception may not have to authority to order the desired action; in this case, the target should be shifted to the individual with the appropriate authority.

b. THINK

The next step of planning the deception story is THINK. During this step, the deception practitioner must determine what perception the target needs to develop in order to cause the desired action. THINK encompasses the orient and decide phases of the OODA decision-making process. A firm understanding of the target's existing perceptions, organizational decision-making processes, and schemata is vital to the success of this phase of planning, as each of these influence the target's decision-making process (Figure 7, Chapter IV). Continuing the previous example, if the Republican Guard commander is a coward then he may need to think U.S. forces do not intend to attack Kuwait City; whereas, if he is not a coward, then he may need to think U.S. forces intend to attack Kuwait City.

c. SEE

The final step in the SEE—THINK—DO methodology is SEE. During this step, the practitioner determines what indicators the target needs to receive in order to develop the desired perception. SEE is the observe phase of the OODA decision-making process. The deception practitioner must know what channels are available for the target to collect indicators. The available channels serve as a limit on the range of deception techniques used to create the desired indicators—it is a waste of resources to craft an indicator the target cannot see. Finishing the previous example, after assessing that the Republican Guard commander is not a coward, it is determined that the channels available are best suited for demonstrations of amphibious training, simulations and portrayals of force build up along the border of Kuwait, and disinformation activities. Paralleling the development of what the target needs to see is the determination of what the target cannot be allowed to see. The indicators which might reveal the actual operation become the focus for covering deceptions to either obscure these indicators via camouflaging actions or by denying the channels capable of conveying the real

indicators. The set of desired indicators are then woven together to create the deception story. The deception story is the: “scenario that outlines the friendly actions that will be portrayed to cause the deception target to adopt the desired perception.”²³³

4. Deception Means

From the list of desired indicators developed during the SEE phase, a series of deception events is developed. Deception events are “deception means executed at a specific time and location in support of a deception operation.”²³⁴ The desired indicators are generated by the execution of the deception events. Deception means are the “methods, resources, and techniques that can be used to convey information to the deception target.”²³⁵ The number of deception means is effectively limitless and is only constrained by the imagination and resources of the practitioner. Deception means are subdivided into three broad categories: physical, cyber electromagnetic, and administration.

a. Physical

Physical means are those which activate the senses, principally the senses of hearing, vision, and smell. A static display of decoy tanks is an example of a physical deception means, as are smoke screens. Physical deception means include morphological deceptions that alter the physical characteristics of an object; such as, camouflage paint schemes or the frames used to disguise tanks as trucks during World War II.²³⁶

Physical means also utilize actions and behavior to convey or hide information from the target.²³⁷ Demonstrations and feints are common forms of actions as physical means. Behavior can be used to create the perception of a pattern in order to condition the target to expect this pattern to continue; for example establishing a routine

²³³ Joint Staff, *JP 3-13.4*, GL-3.

²³⁴ Headquarters, Department of the Army, *Field Manual 1-02*, 1-52.

²³⁵ Headquarters, Department of the Army, *Field Manual 1-02*, 1-52.

²³⁶ Gerwehr and Glenn, *Unweaving the Web*, 39 – 40.

²³⁷ Gerwehr and Glenn, *Unweaving the Web*, 39-40

supply convoy for the purposes of setting an ambush. Alternatively, behavior can be used to prevent the target from perceiving a pattern, such as using night movements to conceal a build up of forces before an assault.

Physical means also include sonic deceptions, as in artillery simulators and loudspeaker systems. It is important to note that not all sonic deceptions need to employ mimicry. One method of sonic deception employed by the 4th Infantry Division in Vietnam was the use of artillery fires to mask the sounds associated with infantry units occupying night positions.²³⁸ Prior to the use of the fires, infantry units risked compromising their location due to the sounds associated with preparing and fortifying the positions. In an urban environment, or other environments not permissive to artillery fires, the sounds of operations on the ground could be masked using helicopter flights or loudspeaker operations in the areas surrounding the activity.

b. Cyber Electromagnetic

Cyber electromagnetic means utilize cyberspace and the electromagnetic spectrum [other than visual] in order to communicate deceptive indicators.²³⁹ Deception activities within cyberspace include the transmission of notional documents as disinformation, portrayals in the form of honeypot systems to bait targets into the cyberspace equivalent of ambushes, and the use of camouflaging programs such as an onion router or proxy server to provide cover for cyberspace activities. Furthermore, overt hacking can be used as a feint in order to distract a systems administrator from other cyber warfare activities.

Deceptions within the electromagnetic spectrum are categorized into three types: manipulative, simulative, and imitative. Manipulative electromagnetic deceptions eliminate existing or convey misleading indicators, as in transmitting misleading information on a network known to be compromised. Simulative electromagnetic

²³⁸ Office of the Adjutant General, *Lessons Learned, Headquarters, 4th Infantry Division Artillery* (Washington, DC: Department of the Army, 1969). <http://handle.dtic.mil/100.2/AD0505964>, <http://handle.dtic.mil/100.2/AD0505964>.

²³⁹ Cyber electromagnetic means replaces the traditional category of technical means in order to include capabilities that did not exist when the technical means category was created.

deceptions replicate existing or create notional capabilities, such as using radio operators to create the emissions of a notional unit. Imitative electromagnetic deceptions introduce emissions into the target's own systems; for example, transmitting false GPS coordinates to the target's navigation system.²⁴⁰

Targets who make use of electronically disseminated policies and orders offer a rich resource for exploitation. These documents reveal a perfect template of what right looks like, and if they include copies of official signatures provide a valuable source of added credibility. Electronically disseminated notional documents can be used to increase friction within the target organization by forcing verification of every electronically disseminated documents, or by forcing the target organization to drop this method of information distribution altogether.

c. Administrative

Administrative means include organizational methods to convey misleading or hide real indicators. Examples of administrative means include operations security and information security to deny indicators; as well as, Human Intelligence officers' use of agents as channels in support of a ruse. Administrative means also include the creation of misleading documents; such as, doctored photographs, notional orders, or fake identification.

One method for developing notional documents is to use existing documents as the base. This expedites the work, and helps to ensure that the notional document looks like a real document. The exemplar for use of existing documents is the German use of decade-old dossiers on Soviet officers as the basis for deceptive dossiers implicating these officers in anti-Stalin activities.²⁴¹

²⁴⁰ For the types of electromagnetic deceptions see: Headquarters, Department of the Army, *Field Manual 3-13: Information Operations: Doctrine, Tactics, Techniques, and Procedures*, 4-7; For spoofing GPS transponders see: Erica Noane, "Hijacking Satellite Navigation," Massachusetts Institute of Technology, <http://www.technologyreview.com/computing/21452/> (accessed February 25, 2012).

²⁴¹ Epstein, *Deception: The Invisible War*, 140 – 143.

5. Execution and Assessment

a. Execution

The deception events needed to generate the desired indicators are incorporated into a time-phased execution matrix in order to create and maintain the desired perception (Table 6). The deception execution matrix should be constructed and centrally controlled by the command exercising control of the overall plan. Additionally, the deception execution matrix must be nested within the overall mission's execution matrix; however, the deception execution matrix must be kept separate to ensure security.

| Task # | Date-Time | Objective | Action | Unit | Termination | Remarks |
|--------|-----------------------------------|---|---|--|-----------------------------------|---|
| 1 | Not later than 0001 5 Jan 1991 | Demonstrate preparations for amphibious operations | Conduct amphibious assault training event | 2nd Marine Expeditionary Force | Not earlier than 28 February 1991 | Coordinate for press coverage of training |
| 2 | Not later than 0001 5 Jan 1991 | Iraqi forces focus defensive preparations against attack from Southeast | Conduct training operations against replicas of Iraqi fortifications | 1st Cavalry Division 2nd Armored Division 2nd Marine Expeditionary Force | Not earlier than 28 February 1991 | Coordinate for press coverage of training |
| 3 | Not earlier than 0001 17 Jan 1991 | Cover movement of XVIII Corps in preparation for 'Hail Mary' | Camouflage movement of XVIII Corps elements through radio silence | XVIII Corps | On order | |
| 3 | Not earlier than 0001 17 Jan 1991 | Cover movement of XVIII Corps in preparation for 'Hail Mary' | Conduct radio traffic mimicking XVIII Corps elements in assembly area | XX Signal Battalion | On order | |
| 4 | Not earlier than 0001 13 Feb 1991 | Iraqi forces remain in defensive positions | Conduct feints and probing attacks against Iraqi lines in tri-border area | 1st Cavalry Division VII Corps Artillery | On order | |
| 5 | Not earlier than H-3 | Draw Iraqi attention to Kuwaiti coast | Conduct simulation of amphibious operations | Seal Team Mimke | Not later than H+1 | |

Table 6. Notional Execution Matrix Based on Events of Operation DESERT STORM²⁴²

Emphasis on attention to detail during execution is critical to crafting a believable story. In an after action review of Operation ELEPHANT during World War II, a member of the 23rd Headquarters Special Troops lambasted the “bad theatre” of the operation. The mission was to portray the 2nd Armor Division so that the actual division

²⁴² Daniel Breitenbach, “Operation Desert Deception: Operational Deception in the Ground Campaign,” (Paper, Naval War College, 1991), accessed 24 May 2012, <http://handle.dtic.mil/100.2/ADA253245>. The date-time information in the table is notional for the purposes of presenting a complete matrix.

could move to the front lines unmolested. Personnel were instructed to inflate the decoy tanks and then go to sleep with no thought of portraying the activities normally seen in a tank unit. Also, the personnel of the 23rd did not wear the patches of the 2nd Armor Division units, nor were the decoys painted with the appropriate bumper numbers. These shortcomings, taken with the blatant disregard of the 2nd Armor Division for operations security during its move, resulted in a very weak ruse.²⁴³ It is paramount that attention to details be observed during deception operations, as a weak deception execution can result in the target recognizing the deception and exploiting it in turn.

b. Assessment

One problem with accessing deception effectiveness is that some assessments would have to rely on counterfactual information. A comment from *Secret Soldiers* sums up this dilemma: “How many American and British fighting men didn’t die because, instead of striking the Allied line at a vulnerable point, the Germans discovered a regiment of dummy tanks concealed—but not too well—in the Normandy woods and pulled back instead? How many Old Hickories survived the push across the Rhine because the Germans were preparing to meet the attack thirty miles away, where the Special Troops were sending up their racket on heaters [loud speakers] and radios and massing their decoys with the help of stagecraft and impersonation?”²⁴⁴

This is not to say measures of effectiveness are not necessary; rather, measures of effectiveness should be tied to observable indicators that will reveal whether the target is acting on the deception. For example, in the case of a feint, a measure of effectiveness might be the target moving his reserves to support his lines at the point of the feint. In the case of deception for subversion, a measure of effectiveness might be reports of red-on-red violence, defections, or an increase in absenteeism within the targeted organization. Measures of effectiveness are turned into intelligence requirements for collection.

²⁴³ Gerard, *Secret Soldiers*, 153 – 156.

²⁴⁴ Gerard, *Secret Soldiers*, 334.

Collecting for deception requires a witting actor on the unit's intelligence staff. This actor serves several functions. First, the individual helps to ensure any information requirements for the deception plan are included in the unit's overall collection plan. Second, as information comes into the intelligence section for processing, the witting actor looks for indicators that show the target is accepting or rejecting the deception. Care must be exercised when looking for indicators that the deception is working as this can activate the confirmation bias, causing indicators to the negative to be overlooked and ambiguous indicators to be interpreted as positive. Finally, the actor must work to ensure the deception indicators do not corrupt the friendly force's understanding of the situation.

6. Termination

At some point a deception operation will lose its utility; therefore, deception operations need to have a plan for the termination of the deception. JP 3-13.4 provides a list of possible termination triggers (Table 7). The termination plan should detail the steps taken to dismantle the deception, e.g., the release of units from a feint or demonstration and cessation of portrayal radio traffic. It is important to note that the termination plan should not be set in stone; as the mission progresses, there may be unforeseen opportunities to leverage the deceptions past the original objective. For example, Operation FORTITUDE SOUTH remained effective past D-Day with the First U.S. Army Group being "transferred" to France in order to maintain pressure on German forces; the last parts of FORTITUDE SOUTH were not terminated until early September 1944.²⁴⁵

²⁴⁵ Roger Hesketh, *Fortitude: The D-Day Deception Campaign*, (Woodstock and New York, NY: The Overlook Press, 2000), 289 – 302.

| Trigger | Description |
|---|---|
| Successful deception operation | The deception objective has been achieved its objectives, or run its course |
| Change in mission | The mission which the deception supports changes to a degree the deception no longer has utility |
| Recalculated risk or probability of success | Some element of the deception estimate changes such that the risks or costs to friendly forces are no longer acceptable |
| Poor timing | Deception is proceeding too slowly, or the window of opportunity has closed |
| New opportunity | Circumstances change where deception may be less risky or more effective if deception efforts are realigned |
| Deception compromise | There is cause to believe the target is aware of at least some aspects of the deception plan |

Table 7. Potential Termination Triggers²⁴⁶

B. PRINCIPLES OF DECEPTION

In addition to the detailed planning processes, a number of authors have published sets of deception principles, factors, and maxims. *FM 100-5* (1954) and *FM 3-13* each present their own doctrinal set of principles. The CIA's maxims from *Deception Maxims: Fact and Folklore* are included in slightly altered form in *FM 90-2* (1988) and *JP 3-13.4* (2006). Michael Dewar, Jon Latimer, and Jock Haswell each offer their own take on deception principles; though there is a good deal of overlap. Finally, Daniel and Herbig provide a set of deception success factors; while Dudley Clarke muses on deception reflections. From these various sets of deception guidance, it is possible to synthesize seven broad principles for deception practitioners²⁴⁷ (Table 8).

²⁴⁶ Joint Staff, *JP 3-13.4*, IV-13.

²⁴⁷ Daniel and Herbig acknowledge the strategic initiative factor is more of an observation than a controllable factor for the deception practitioner; therefore, this factor is not included as a principle in the composite list. Daniel and Herbig, "Propositions on Military Deception," 24 – 25.

| FM 100-5 (1954) Fundamentals | CIA Maxims | FM 3-13 Principles | Michael Dewar Principles | Jon Latimer Principles | Jock Haswell Principles | Daniel and Herbig Factors | Dudley Clarke Reflections | Synthesized Deception Principles |
|---|--|---|--------------------------------------|---|--|--|---|---|
| must be executed in a realistic and natural manner and must fit logically into the overall situation | Magruder's principles Limitations to human information processing Care in the design and placement of deceptive material | Focus on the target Exploit target biases Avoid windfalls | Be what the enemy expects | Credibility and confirmation Focus | Credibility | Plausibility and confirmation of the lie Target Predispositions | Support the enemy's false notions Personal knowledge of the enemy is an asset | Know the target and exploit existing perceptions |
| must be supported by and coordinated with intelligence countermeasures to conceal our activities from the enemy. | | Enforce strict OPSEC | Security | Security | Security | Secrecy, Organization, and Coordination | | Security is Paramount |
| The method or means of deception should be constantly varied. | The multiple forms of surprise Jones' dilemma | Employ variety Minimize falsehood/leverage truth | Use many channels for indicators | Flexibility | Flexibility Multi-channel support | Adaptability of deception | | Utilize Flexibility, Variety, and Conditioning |
| Combat deception is a continuing action carried out by all echelons of command in activities such as cover and concealment, individual combat, use of dummy positions and installations, and decoys | | Centralize control | Centralized coordination and control | Coordination and centralized control | Coordination and centralized control | | Deception planner needs direct access to leadership | Coordination and Control |
| must be reasonably certain of causing the enemy to discard certain capabilities which are unfavorable to the success of our plan | | Cause the target to act | | Action | | | Deception plan must focus on what the enemy is to "do" not what the enemy is to "think" | Requirement for Target Action |
| must support and be based upon the main tactical plan | Axelrod's contribution | Ensure integration | Sound and thorough preparation | Preparation and timing | Preparation | | Deception is an operations function | Preparation and Timing |
| if successful, must further the real plan and if unsuccessful must not jeopardize the real plan. | A sequencing rule The importance of feedback | Ensure timeliness Utilize space effectively | Timing is crucial | | | | Deception requires extensive intelligence support | |
| Enemy intelligence must be given the opportunities and time to develop the deception picture which has been planned | | Work within available competencies and resources | | | | | Building a false order of battle is essential | |
| Deception is effective only for a limited period of time. | | | | | | | | |
| may produce a surprise reaction contrary to the planner's expectations. | The monkey's paw | | | | | | | Beware Unexpected Consequences |
| | | | | | | Strategic initiative | | The Offense Offers Better Opportunity for Deception |

Table 8. Deception Fundamentals, Principles, and Maxims²⁴⁸

²⁴⁸ Headquarters, Department of the Army, *Field Manual 100-5: Field Service Regulations—Operations*, 1954, 37 – 38; Deception Research Program, *Deception Maxims: Fact and Folklore* (Washington, DC: Office of Research and Development, Central Intelligence Agency, 1980). Variations included in Headquarters, Department of the Army, *Field Manual 90-2: Battlefield Deception*, 1-3 and Joint Staff, *JP 3-13.4: Military Deception*, A1-A2; Headquarters, Department of the Army, *Field Manual 3-13: Information Operations: Doctrine, Tactics, Techniques, and Procedures*, 4-4; Dewar, *The Art of Military Deception in Warfare*, 14 – 15; Jon Latimer, *Deception in War* (New York: The Overlook Press, 2001), 60 – 70; Haswell, *The Tangled Web: The Art of Tactical and Strategic Deception*, 39 – 41; Daniel and Herbig, *Propositions on Military Deception*, 16 – 25; Dudley Clarke, 6 September 1972, “Some Personal Reflections on the Practice of Deception in the Mediterranean Theatre from 1941 to 1945,” memorandum included in Mure, *Master of Deception: Tangled Webs in London and the Middle East*, 273 – 275.

1. Know the Target and Exploit Existing Perceptions

a. Understand the Target

Knowing the target is essential to successful deception as every target is unique. British deception efforts in the Pacific during World War II had to be significantly modified from the model of deception operations in North Africa and Europe; the Japanese commanders did not trust their intelligence staff like the German commanders did.²⁴⁹ Every reasonable effort should be taken to develop an understanding of the target's personal, organizational, and cultural schemata; as well as, to identify any existing perceptions.

b. Exploit Existing Perceptions

Deception can be used to both reinforce the target's existing perceptions and to change the perceptions. Whenever possible, deceptions should seek to leverage existing perceptions as is the far easier of the two endeavors. The anchoring bias discussed in Chapter IV works against changing perception, as do several other cognitive biases. The idea of using the target's existing perceptions and beliefs is a common admonishment in deception writings, as shown in Table 8. The Magruder Principle from the set of deception maxims compiled by in the CIA's *Deception Maxims: Fact and Folklore* states: "It is generally easier to induce an opponent to maintain a preexisting belief than to present notional evidence to change that belief. Thus, it may be more fruitful to examine how an opponent's existing beliefs can be turned to advantage than to attempt to alter these views."²⁵⁰ Reinforcing existing perceptions also leverages confirmation bias as discussed in Chapter IV. Operation FORTITUDE SOUTH during World War II is an exemplar of using deception to reinforce the target's existing perceptions. In this case, the German command expected the inevitable invasion of Europe would come at the Pas de Calais.

This principle is not a hard and fast rule; operational necessity may require changing the target's existing perceptions, as was the case with General Pershing and the

²⁴⁹ Clarke, "Some Personal Reflections," 273 – 274.

²⁵⁰ Deception Research Program, *Deception Maxims: Fact and Folklore*, 5.

reduction of the St. Mihiel salient during World War I. German forces expected General Pershing to attack where he intended to attack. General Pershing used a convincing demonstration supported by several pieces of disinformation to convince the Germans the attack would come elsewhere. As a result, the German's shifted forces away from the point of decision, facilitating General Pershing's success.²⁵¹

c. Avoiding Windfalls

While the deception practitioner wants the target to receive the deception indicators, care must be taken that the deception indicators are not too easily presented to the target. Given how difficult intelligence collection can be, there is a natural tendency to be suspicious of information too freely gained. *FM 3-13* offers two methods to reduce target suspicion of windfalls. "The first is the unintentional mistake, designed to make the target believe that he obtained the indicator due to a friendly error or oversight."²⁵² An example of an unintentional mistake ruse occurred during deception operations in support of the American Expeditionary Force's assault on the Saint Mihiel salient during World War I; General Pershing's chief of staff left a crumpled sheet of carbon paper with the imprint of a disinformation laden memo in the wastebasket of his hotel room, knowing the German agents on the hotel staff would find the carbon paper.²⁵³

The second method of reducing suspicion of deception indicators is bad luck, which is designed to make the target believe the information was obtained "because the source fell victim to uncontrollable circumstances."²⁵⁴ Though now considered apocryphal, Meinertzhagen's haversack ruse is still a good example of how this method can be employed.²⁵⁵ In order to deceive Turkish forces of British intent to capture Beershaba, Meinertzhagen developed a notional set of documents indicating the focus of

²⁵¹ See Chapter VI for a detailed account of the deception in support of the St. Mihiel operation.

²⁵² Headquarters, Department of the Army, *FM 3-13*, 4-10.

²⁵³ The Editors of the Army Times, *The Tangled Web*, 71.

²⁵⁴ Headquarters, Department of the Army, *FM 3-13*, 4-10.

²⁵⁵ Meinertzhagen has been accused of fraudulently taking credit for both the idea and execution of the haversack ruse. See: Brian Garfield, *The Meinertzhagen Mystery: The Life and Legend of a Colossal Fraud*

British efforts was the capture of Gaza, not Beershaba. Next, Meinertzhagen rode toward Turkish lines until he made contact with a Turkish patrol. Once the Turkish patrol began pursuit, Meinertzhagen fled, and in his haste lost his haversack containing the notional documents. Meinertzhagen took pains to increase the legitimacy of the lost haversack. First, Meinertzhagen spattered his haversack with blood so it appeared he had been wounded during the encounter. Second, in the days after the encounter, numerous British patrols were observed scouring the site of the encounter as if searching for the missing haversack.²⁵⁶

2. Security is Paramount

Maintenance of security is vital to a successful deception operation. Failure to properly secure the deception plan can result in leaked indicators that tip the hand to the target. If this occurs, there is a significant risk that the target will in turn deceive the practitioner, turning the tables. Hesketh states in the conclusion of his work that one of the cases against physical deception is the necessity to let too many people in on the secret, increasing security risks.²⁵⁷ Similarly, von Greiffenberg admonishes: “If the strictest secrecy is not observed all deception projects—even the smallest—are doomed to failure from the very start.”²⁵⁸

However, security must be balanced with the need for coordination, as too much security can undermine the coordination necessary for the deception to succeed. This is exemplified by British raid at Saint-Nazaire. The British Air Force was tasked with conducting a bombing mission on Saint-Nazaire as a feint to distract the German forces from the raiding force; however, the bomber crews were not told of the reason for their mission, so when low clouds obscured the target, the mission was called off with minimal bombing conducted. The short bombing mission put German forces on alert, rather than

²⁵⁶ John Ferris, “‘FORTITUDE’ in Context: The Evolution of British Military Deception in Two World Wars, 1914-1945,” in *Paradoxes of Strategic Intelligence: Essays in Honor of Michael I. Handel*, Richard K. Betts, and Thomas G. Mahnken, eds. (London: Frank Cass, 2003), 120.

²⁵⁷ Hesketh, *Fortitude*, 353.

²⁵⁸ Hans von Greiffenberg, *Deception and Cover Plans Project #29*, ed. Harald Kehm, trans. J. B. Robinson (Koenigstein, Germany?: Foreign Military Studies Branch, 1950), 81.

the intended effect of providing cover for the raid force. In the after action review, the bombing crews were adamant that had they known the true purpose of the bombing mission, they would have not have cut the mission short.²⁵⁹

3. Utilize Flexibility, Variety, and Conditioning

a. Flexibility

Deceptions must be flexible and the practitioner ready to revise and adapt the plan based on feedback from the target. For example, Operation FORTITUDE SOUTH was expected to be terminated shortly after the Normandy landings as the landings would betray the Allies true intentions. However, in order to keep the German Fifteenth Army from assaulting the Normandy beachhead from its position in the Pas de Calais region, the Allies decided to adapt and continue OPERATION FORTITUDE SOUTH's fiction that the Allies still had the capability to attack Pas de Calais. The modified deception plan became Operation FORTITUDE SOUTH II, and succeeded in keeping the Fifteenth Army in place.²⁶⁰

b. Variety

Deceptions should employ variety, both in terms of indicators and channels in order to increase the likelihood of the deception story reaching the target. Reliance on a limited indicators or channels risks the indicator not being received by the target. This can occur either due to noise disrupting the indicator, or if the target is not monitoring the channel when the indicator is transmitted. The number of indicators and channels needed is dependent on the practitioner's knowledge of the target. While it is possible for a single indicator and channel to be used if the practitioner has direct access to the target; such as, General Nathan Bedford Forrest's' portrayal of additional troops during a parley with a Union stronghold's commander. However, in general practice, there should be multiple indicators and channels. For example, in support of Operation

²⁵⁹ McRaven, *Spec Ops*, 131 and 154.

²⁶⁰ Hesketh, *Fortitude*, 241.

FORTITUDE SOUTH, the Allies used a number of indicators and channels to include: several agents of the DOUBLE CROSS system, decoys and dummies to simulate units, radio teams to portray units, and disinformation.

c. Conditioning

Conditioning, also referred to in literature as “crying wolf,” is a deception technique that relies on desensitizing the target to friendly actions. Conditioning seeks to create three misconceptions in the target’s mind. First, friendly activities are following a routine. Second, the routine is set, with deviation unlikely. Third, because the friendly activities are following a set routine, the risk to the target is reduced.²⁶¹ The quintessential example of conditioning is the Egyptian preparations leading up to the 1973 Yom Kippur War. The Egyptian Army undertook a series of training exercises on its side of the Suez Canal, establishing a pattern of behavior. The staging of forces for the war followed the pattern of the training exercises, lulling Israeli intelligence into a false sense of understanding.

Stonewall Jackson provides an additional exemplar for conditioning the target. Early in the Civil War, the Baltimore and Ohio Railroad had been allowed to maintain its East-West line between Washington and the West, despite a portion of the line crossing through Virginia. Jackson, while serving as commander at Harper’s Ferry, complained that the trains disrupted his men’s sleep and requested all east bound trains run between 11pm and 1am. The railroad company complied in an effort to maintain good will. After a while, Jackson requested all west bound trains run at the same time as the east bound trains; again the railroad complied. Once the schedule was up and running, Jackson used his detachments at Point of Rocks and Martinsburg to trap all the rolling stock between them. The trains were then diverted to the south for use by the Confederacy.²⁶²

²⁶¹ Gerwehr and Glenn, *The Art of Darkness: Deception and Urban Operations*, 21.

²⁶² G. F. R. Henderson, and Garnet Wolseley, *Stonewall Jackson and the American Civil War* (London, New York [etc.]: Longmans, Green and Co., 1936), 1:121 – 122.

4. Coordination and Control

a. Control

Control of deception planning and execution should reside at the lowest echelon capable of executing the plan. For example, an infantry platoon conducting the camouflage aspects of cover should maintain control of the plan at the platoon level. Control of deception plans requiring external support, e.g., airborne jamming, should be controlled at the level capable of coordinating for the support. This allows for von Greiffenberg's guidance that: "One responsible agency issues the order, assigns what equipment may be necessary, and supervises the course of the operation as a whole."²⁶³ At the same time, the commander overseeing the deception operation must "make one individual responsible for overseeing a [deception] operation."²⁶⁴ Having too many people "in charge" results in no one being in charge.

b. Coordination

Coordination for a deception plan must be made with adjacent units and higher headquarters so that deceptive indicators do not contaminate the other units' intelligence collection efforts. Additionally, coordination helps to ensure the deception plan nests with and compliments higher and adjacent unit plans, and does not conflict or degrade these plans. An example of poor coordinate occurred during the assault on the German garrison at Brest during the summer of 1944; the 23rd Headquarters Special Troops executed a sonic simulation of tank activity to distract the Germans from the main effort. Through a lapse of coordination, Company D, 709th Tank Battalion assaulted through the area the 23rd had been conducting its simulation; as a result, the German line, alert and reinforced thanks to the deception, decimated the company.²⁶⁵

²⁶³ Von Greiffenberg, *Deception and Cover Plans*, 80.

²⁶⁴ Headquarters, Department of the Army, *FM 3-13*, 4-16.

²⁶⁵ Gerard, *Secret Soldiers*, 183 – 184.

5. Requirement for Target Action

For deception to succeed, the target must execute the desired action or inaction; to merely change the target's perception is to waste time and resources. This requirement demands the deception practitioner never lose sight of the deception goal. As Dudley Clarke declares:

It is important to appreciate from the start that the only purpose of Deception is to make one's opponent ACT in a manner calculated to assist one's own plans and to prejudice the success of his. In other words, to make him *do* something. Too often in the past we have set out to make him THINK something, without realizing that this was no more than a means to an end. Fundamentally it does not matter in the least what the enemy thinks; it is only what line of action he adopts as a consequence of his line of thought that will affect the battle. As a result we resolved the principle that a commander should tell his Deception staff what he wants the enemy to DO... while it is the duty of the latter to decide, in consultation with the Intelligence Staff, what he should be made to THINK in order to induce him to adopt the required course of action.²⁶⁶

6. Preparation and Timing

As German General Hans von Greiffenberg states in his survey of German deception during World War II: "Deception requires detailed preparation, in which details and seeming trifles cannot be overlooked. Only seldom will results be produced through improvisation."²⁶⁷

Adequate resources must be balanced with economy of force. Economy of force dictates that the minimum resources necessary to secondary tasks in order to maximize forces available for the main effort. Too many resources diverted to secondary efforts may leave insufficient forces for the main effort; conversely, too few resources allocated in support of deception can lead to failure. For example, one of the reasons for the failure of Operation COCKADE was insufficient forces in support of the deception. Operation COCKADE was an Allied deception designed to conceal the weakness of Allied Forces in Britain, and to discourage Germany from transferring forces out of Western Europe to the

²⁶⁶ Dudley Clarke as quoted in Michael Howard, *British Intelligence in the Second World War: Strategic Deception*, vol. 5 (New York: Cambridge University Press, 1990), 41.

²⁶⁷ Von Greiffenberg, *Deception and Cover Plans*, 80.

Eastern Front.²⁶⁸ The plan required significant resources for execution, but the supporting commands successfully resisted tasking efforts, resulting in an ultimately unconvincing deception.²⁶⁹

With regards to timing, two adversaries arrive at the same conclusion. Von Greiffenberg states: “The enemy intelligence must be given opportunities to develop the picture which has been arranged.”²⁷⁰ While on the Allied side, Clarke states: “Every Deception Plan must be given time to work. It is no good telling a Deception Staff to try and influence an enemy ‘at once.’”²⁷¹

7. Beware Unintended Consequences

As with any operation, a deception can cause unintended consequences. These consequences can vary from insignificant to potentially catastrophic. “Under certain circumstances deceptions can produce effects exactly opposite to the planned objective. It is therefore advisable to reflect how such a reversal can be detected in time.”²⁷² The famous example of a reversal was Dudley Clarke’s deception of the Italian force in Abyssinia; rather than reinforcing the southern flank as intended, the Italian force withdrew to the north, directly into the intended path of the actual attack.²⁷³

Operation Desert Storm experienced unintended consequences of the deception operations as a result of the deception being perhaps too successful. The threat of an amphibious assault caused the Iraqi forces to pull their defenses forty kilometers north of the southern Kuwaiti border in an attempt to prevent any amphibious assault from flanking the lines. The lack of resistance in southeastern Kuwait allowed coalition forces operating in this area to rapidly outpace other elements in the attack. This caused the synchronization of coalition efforts to be disrupted; some initiative was sacrificed as units

²⁶⁸ Deception Research Program, *Deception Failures, Non-Failures, and Why* (Washington, DC: Office of Research and Development, Central Intelligence Agency, 1982), 25.

²⁶⁹ Charles Cruickshank, *Deception in World War II* (London: Book Club Associates, 1979), 61 – 84.

²⁷⁰ Von Greiffenberg, *Deception and Cover Plans*, 81.

²⁷¹ Dudley Clarke as quoted in Howard, *British Intelligence*, 41.

²⁷² Von Greiffenberg, *Deception and Cover*, 82.

²⁷³ Clarke, “Some Personal Reflections,” 273.

were held back in an effort to regain synchronization. Additionally, the amphibious demonstrations sparked the withdrawal of Iraqi forces more quickly than expected, complicating the destruction of several key Iraqi elements.²⁷⁴

C. DECEPTION IN SUPPORT OF IRREGULAR OPERATIONS

History is replete with examples of deception in support of conventional operations; deception can support irregular operations as well. Irregular operations include unconventional warfare, counterinsurgency and foreign internal defense, stability and humanitarian assistance, counterterrorism, and cyber warfare.²⁷⁵ While theoretically any deception technique can be used in support of any type of operation, certain deception techniques lend themselves to the nature of the various types of irregular operations.

1. Unconventional Warfare

A critical concern for unconventional warfare operations is security, especially during the nascent phases of the campaign when the state holds a distinct force advantage over the movement. Deception is a vital tool for maintaining the security of both the forces working with the guerrilla force and for the guerrilla force as well. Otto Heilbrunn in his work *Partisan Warfare* quotes extensively from an unnamed Vietminh manual on the utility of deception in support of guerrilla operations:

We must act above all when the enemy, full of self-confidence, is underestimating us. We then order our men to disguise themselves as coolies, as enemy soldiers, as hawkers on their way to the market place. Our disguised fighters must exploit the element of surprise in order to wipe out the enemy in his fort or garrison. This technique requires constant and detailed information; one must be fully informed about the enemy's situation, from the first preparations to the time of execution.²⁷⁶

²⁷⁴ Breitenbach, "Operation Desert Deception," 22 – 24.

²⁷⁵ While cyber warfare and humanitarian assistance are not normally included in the set of irregular warfare, they are included here since they are not conventional operations.

²⁷⁶ "Guerilla selon l'école communiste," *Bulletin Militaire* (Leopoldville: Etat-Major de la Force Publique, 1955) as quoted in Otto Heilbrunn, *Partisan Warfare* (New York: Frederick A. Praeger, 1962), 95. This is perhaps from Vo Nguyen Giap's *People's War, People's Army*.

The camouflaging aspects of deception would seem to be of particular importance to an unconventional warfare campaign in order to allow the special operations force and the guerrilla force to move amongst the population like Mao's fish.

The adoption of Afghan sartorial and grooming standards by special operations forces elements during the opening phase of Operation ENDURING FREEDOM served two purposes. First, the standards were adopted for the purposes of bridging the cultural divide between the SOF elements and the Northern Alliance forces, reducing the "out-groupness" of the SOF elements and leveraging the influence principle of liking. Second, the sartorial and grooming standards increased security for the SOF elements by serving as a form of blending cover, decreasing the visual signature of the SOF elements by merging them visually with the Northern Alliance forces.

FM 31-21: Guerrilla Warfare and Special Forces Operations suggests another method of deception in support of security:

False rumors and false information concerning guerilla strength, location, operations, training, and equipment can be disseminated by counterintelligence through clandestine nets. Facts may be distorted intentionally to minimize or exaggerate guerilla' capabilities at any given time. Although such activities are handled within the intelligence section, they must be coordinated with the security section in order to prevent inadvertent violations of security.²⁷⁷

In this method, deception can cause the targeted regime to expend resources chasing ghosts, such as MACVSOG creating the perception there were far more agents operating within North Vietnam than actually present.

Finally, deception in support of subversion can be used to introduce friction to the regime's decision-making process through the use of ambiguity increasing measures. Slowing down the adversary's OODA process is as effective as increasing the speed of

²⁷⁷ Headquarters, Department of the Army, *FM 31-21: Guerrilla Warfare and Special Forces Operations* (Washington, DC: Department of the Army, 1958), 106.

one's own. Sufficient ambiguity increasing active deceptions coupled strong cover deceptions increase friction to the point of inducing mental isolation, with the regime's leadership unable to act.²⁷⁸

2. Counterinsurgency/Foreign Internal Defense

Pseudo-operations like those employed by the British in Kenya during the Mau-Mau uprising may be of use in overcoming the information advantage enjoyed by the insurgency through intelligence gathering.²⁷⁹ For example, a pseudo-operation might be designed to lure in supporters and potential supporters of the targeted group for the purposes of intelligence collection and nuanced influence activities. Care must be exercised with pseudo-operations as they thread a fine line with perfidy, international law stipulates that while combatants may wear enemy uniforms may be worn, combatants are prohibited from fighting in them.²⁸⁰ The Selous Scouts of Rhodesia crossed the line into perfidy by attacking an insurgent base camp while portraying Mozambique military forces.²⁸¹

In addition to pseudo-operations, other deceptions may work to illuminate the insurgency. For example, disinformation in the form of forged orders inserted into an insurgent network can be used to fix cells of the network in time and space for targeting by directing the cell to attend a meeting. The effectiveness of this approach depends on the nature of the insurgent group; a strict hierarchal structure will be more susceptible than a loose-knit structure. Likewise, disinformation about friendly collection capabilities can be used to canalize network communications onto less secure or fewer channels, facilitating collection efforts, or to protect existing collection capabilities. For example, during World War II, ULTRA was protected at times by attributing the intelligence collected to other means.

²⁷⁸ Boyd, *The Strategic Game*, 47.

²⁷⁹ See: Kitson, *Gangs and Counter-gangs*.

²⁸⁰ Marie Anderson and Emily Zukauskas, eds., *Operational Law Handbook: 2008* (Charlottesville, VA: The Judge Advocate General's Legal Center and School, 2008), 23.

²⁸¹ Lawrence Cline, *Pseudo Operations and Counterinsurgency: Lessons from Other Countries* (Carlisle, PA: Strategic Studies Institute, 2005), accessed 20 April 2011, <http://www.strategicstudiesinstitute.army.mil/pubs/download.cfm?q=607>, 12.

Deception for the purpose of subversion could be used to sow discord amongst the insurgent network. This tactic could be particularly disruptive if the practitioner has a firm understanding of the network and is able to target the individuals serving as links between cells. The British used deception in support of subversion against the Irish Republican Army by creating the perception the IRA was riddled with British agents. The IRA acted on the perception by conducting an internal witch hunt. The resultant purge of misidentified “agents” greatly weakened the organization and allowed the British to reach favorable terms for a ceasefire.²⁸² Additionally, since there is an inverse ratio between security and efficiency, deception for subversion can be used to cause the target to increase security measures to the point of operational ineffectiveness.²⁸³ Finally, as discussed in the unconventional warfare section, deception in support of subversion and mental isolation can be used to introduce friction in the OODA decision-making process, potentially negating an inherent advantage of networks.

One note of caution, as tempting as the idea might seem, false flag attacks on the populace for the purposes of discrediting the insurgent group are a fundamentally bad idea. The effects on popular support for the host nation government and the U.S. mission would be catastrophic if the true nature of the operation were revealed.

3. Stability Operations / Humanitarian Assistance Operations

Deception operations in support of stability operations and humanitarian assistance operations are probably most appropriate when in support of force protection or operations security. For example, in areas where banditry is a problem, a demonstration convoy might be useful to draw attention away from an actual relief convoy. Blending and disguising aspects of deception may be appropriate if a lower signature is desired. Rules of engagement and political sensitivities may significantly constrain the palette of deception techniques available.

²⁸² Benjamin Higginbotham, “On Deceiving Terrorists” (Master’s thesis: Naval Postgraduate School), accessed 4 January 2010, <http://handle.dtic.mil/100.2/ADA401353>, 3 – 5.

²⁸³ J. Bowyer Bell, “Aspects of the Dragonworld: Covert Communications and the Rebel Ecosystem,” *International Journal of Intelligence and Counterintelligence* 3, no. 1 (1989): 17.

4. Counterterrorism

Benjamin Higginbotham, in his thesis “On Deceiving Terrorists,” presents three compelling methods where deception can be used against terrorists and terrorist organizations:

- Create and exploit inefficiencies and weaknesses in the terrorist organization
- Facilitate counter-terrorist operations
- Conceal counter-terrorist capabilities and intentions²⁸⁴

Deception in support of subversion as discussed in the previous section on counterinsurgency is equally applicable against terrorist groups, and could prove quite useful at creating and exploiting internal inefficiencies and weaknesses of terrorist groups. For example, disinformation spread via rumors that there is an informant within the terrorist group could be spread in areas where the terrorist are suspected of operating in order to sow dissension. Alternatively, if previous purges have occurred, a disinformation program that suggests the group leadership is planning another purge could be used to increase distrust of the leadership, and perhaps an internal preemptive strike against the leaders.

Deception can facilitate counter-terrorist operations by creating surprise. In the Israeli raid on Entebbe, deception in the forms of portrayal and masking played a critical role in achieving surprise and retaining initiative. First, the Israeli aircraft masked their approach behind the signature of a regularly scheduled aircraft. Additionally, the Israeli commando force portrayed Ugandan military forces through the use of Ugandan uniforms and a Mercedes disguised to look like a Ugandan staff car. These techniques sowed confusion amongst the terrorists and their Ugandan guards, with the terrorists initially believing the Ugandans had turned on them.²⁸⁵

²⁸⁴ Higginbotham, “On Deceiving Terrorists,” 25 – 26.

²⁸⁵ McRaven, *Spec Ops*, 341 – 376.

5. Cyberwarfare

Cyberspace as an emerging arena for military operations presents as many opportunities for deception as the physical world. For example, honeypots can be used to mislead the target for the purpose of intelligence gathering. Disinformation in the form of spoofed emails could be used to prompt any manner of actions by the target. Pseudo-operations in the form of websites portraying adversary websites can be used for disinformation, intelligence gathering, or influence operations. On the defense, ambiguity increasing deception can be used to protect sensitive information—e.g., operations plans, personnel rosters, or technical data—through the use of multiple files where only one is the true information

D. MILITARY DECEPTION FAILURES

Finally, no discussion of the practice of deception is complete without addressing deception failures. Somewhat optimistically, the CIA report, *Deception Failures, Non-Failures, and Why*, states the following with regard to deception failures: “It can accurately be stated that deception nearly always succeeds, at least to some degree. Indeed it should be emphasized that deception may succeed even when one or more ... causes for failure is present.”²⁸⁶ Despite this assertion, the report provides eleven reasons why a deception may fail. These reasons were derived from an analysis of Allied and Axis deception failures during World War II:

- Detection by the intended victim
- Incomplete or incorrect understanding of the target’s intelligence apparatus
- Incomplete or incorrect modeling of the deception process
- Inadequate or improper channels or vehicles to convey the deception story
- Incomplete or inadequate control over the significant variables of the deception process
- Incorrect assessment of the target’s reaction
- Deception story falls outside the deception window, e. g., too sophisticated to be received or too simplistic to be believed

²⁸⁶ Deception Research Program, *Deception Failures, Non-Failures, and Why*, 45 – 46.

- Unreasonable expected result
- Target unable to react in the intended manner even if deception considered credible
- Inadequate time for the deception process to run its course
- Bad luck²⁸⁷

With the exception of bad luck, each of these failures represents a shortcoming in the planning and/or execution of the deception plan. For example, “detection by the intended victim” can be caused by failure to properly cover the indicators of the true operation, by a poor deception story, or by shoddy execution of the deception tasks. Likewise, “inadequate or improper channels or vehicles to convey the deception story” represents a failure to either assess the channels available the target, or a failure to revise the plan after discovering the channels were insufficient. While no deception plan is perfect, proper adherence to the information requirements and principles laid out in this chapter can reduce the risk of deception failures.

²⁸⁷ Deception Research Program, *Deception Failures*, 3 – 4.

THIS PAGE INTENTIONALLY LEFT BLANK

VI. HISTORIC U.S. ARMY USE OF DECEPTION

Always mystify, mislead, and surprise the enemy.

– General Thomas “Stonewall” Jackson²⁸⁸

This chapter surveys the use of deception by the U.S. military from the Revolutionary War to Operation DESERT STORM. The purpose of this chapter is twofold; first to present additional examples of deception in action as prompts for the deception practitioner’s creative processes, and second to reinforce the idea that deception has been of great utility for the U.S. military throughout its history.

A. REVOLUTIONARY WAR – BATTLE OF TRENTON

January 2, 1777 saw George Washington trapped against the banks of the Delaware River outside Trenton, New Jersey by a superior British force under General Cornwallis. Despite suggestions to attack straight away, Cornwallis was sufficiently satisfied that Washington was trapped and so waited to attack the next day. The British set camp inside Trenton. During the night, the American force built large bonfires of cedar rails along their lines and continued through the night working to reinforce the earthworks. British sentries could see movement and hear the sounds of the digging. Sporadic cannon fire from the American lines kept the British in Trenton jumpy. When Cornwallis and his men arose the next morning to quash the rebellion all they found was an abandoned camp with piles of fresh dirt and smoldering fires.

The fires and work crews served as demonstrations; and the cannon fire as a feint in order to reinforce Cornwallis’s perception that Washington was trapped, and to mask the noise of the American army quietly marching away to attack Princeton. Wagon and cannon wheels were wrapped in cloth to deaden the noise of movement over the frozen ground. A group of 500 stayed behind to work the deception. These men pulled out

²⁸⁸ General Jackson in a letter to Brigadier John Imboden, as quoted by Imboden, as quoted in: Henderson, *Stonewall Jackson*, 1:420.

before dawn to rejoin the main body.²⁸⁹ Security of the plan was so tight that “no one below the rank of brigadier was privy to the plan; officers who were quartered in outlying farmhouses awoke the next morning to find the army gone....”²⁹⁰

| | |
|--------------------------|---|
| Deception Objective (DO) | British forces do not impede withdrawal |
| Deception Target | General Cornwallis |
| Deception Story (THINK) | American Army preparing for morning battle |
| Deception Events (SEE) | Demonstration – bon fires Demonstration – men building fortifications Feint – cannon fire Securing – tight security on plan Masking – noise of work obscuring noise of movement |
| Termination Trigger | Main force withdrawal completed |

Table 9. Deception Analysis of Battle of Trenton

B. CIVIL WAR

1. Peninsula Campaign

A classic example of an inferior force using deception to transform certain defeat to a tactical stalemate and strategic victory occurred during the Civil War. Major General Magruder was tasked with preventing the largest Union army yet assembled from reaching Richmond. To achieve this objective, Magruder utilized a number of deceptions, including the use of soldiers portraying deserters to feed General McClellan disinformation exaggerating the size and composition of the Confederate force. The “deserters” information was confirmed by aerial observation which reported on the troop movements, cavalry, and camp fires carefully choreographed by Magruder. When McClellan approached the Confederate breastworks, he was presented with a now famous simulation—Quaker guns. In order to inflate the number of cannon available to the Confederate force, Magruder had tree trunks stripped, bored, and painted so that they simulated cannon to the casual eye. In McClellan’s perception, the Confederate force was larger and better equipped than his, and so McClellan delayed his attack for over a month while he assembled the forces he felt necessary for the attack. This delay allowed ample

²⁸⁹ Richard M. Ketchum, *The Winter Soldiers*, 1st ed. (Garden City, N.Y: Doubleday, 1973), 344 – 351.

²⁹⁰ Ketchum, *The Winter Soldiers*, 348

time for the Army of Northern Virginia to place itself between McClellan and Richmond. Additionally, the delay subjected McClellan's force to the bad weather and mosquitos of the peninsula, resulting in many soldiers combat ineffective from illness. When McClellan finally attacked in early May, he found the Quaker guns, but not Magruder. Magruder had used the delay to withdraw his force back to the Army of Northern Virginia lines; Richmond was safe.²⁹¹

| | |
|--------------------------|---|
| Deception Objective (DO) | Union forces do not press attack until after arrival of Army of Northern Virginia |
| Deception Target | General McClellan |
| Deception Story (THINK) | Confederate force too large to attack without significant Union reinforcements |
| Deception Events (SEE) | Simulation – Quaker guns Portrayal – cavalry and infantry units replicating additional units Simulation – additional camp fires |
| Termination Trigger | Army of Northern Virginia in position |

Table 10. Deception Analysis of Peninsula Campaign

2. Capture of Atlanta

During the summer of 1864, Major General Sherman attempted for several months to capture Atlanta, Georgia; however, the city was well fortified and Sherman was unsuccessful in compelling the surrender of the Confederate defenders under General John Hood. Unable to crack the nut that was Atlanta via siege, and unwilling to mount a potentially disastrous frontal assault, Sherman resorted to deception and the indirect approach.

The deception used by Sherman was a feigned withdrawal. Prior to 26 August, Sherman ordered his men be provisioned with 20 days rations, the unit trains reduced to what was absolutely necessary, and all sick and wounded evacuated. Additionally, Sherman cut communications with higher headquarters to reduce the chances of a leak or captured courier.²⁹² As part of the preparatory movements, Sherman had one brigade of dismounted cavalry from the 2nd Cavalry Division occupy the trenches of the 12th and

²⁹¹ The Editors of the Army Times, *The Tangled Web*, 4 – 13.

²⁹² The Editors of the Army Times, *The Tangled Web*, 15 – 17.

4th Corps in order to prevent the defenders from noticing the corps' movements.²⁹³ After midnight on the 26th, in a move reminiscent of Washington at Trenton, Sherman's force began a near silent withdrawal under the cover of darkness. The withdrawal was not discovered by the Confederate defenders until the next morning. Initial caution transitioned into celebration as the defenders viewed the now empty Union positions strewn with cast off materials. The idea that the Union forces had withdrawn was reinforced by reports of Union cavalry to the west scrounging for rations.²⁹⁴ The Hood telegraphed Richmond reporting his belief that "...the hungry Union army was giving up the siege and withdrawing across the Chattahoochee."²⁹⁵ Sherman's forces maintained tight security until seizing Jonesborough, south of Atlanta. By 2 September, Atlanta was in Union hands.²⁹⁶

| | |
|--------------------------|--|
| Deception Objective (DO) | Confederate forces fail to react to flanking maneuver |
| Deception Target | General Hood |
| Deception Story (THINK) | Union forces have retreated in defeat |
| Deception Events (SEE) | Portrayal – 2nd Cavalry Division posing as 12th and 4th Corps Demonstration - withdrawal Disinformation – cavalry claim to be short on rations Blending – silence during withdrawal and movement Securing – communications silence |
| Termination Trigger | Seizure of Jonesborough |

Table 11. Deception Analysis of Atlanta

3. Athens, Alabama

In 1864, Nathan Bedford Forrest elicited the surrender of a Union stronghold at Athens, Alabama through the artful use of portrayal. After a short siege of the fort, Forrest arranged a parley with the fort's commander, Colonel Wallace Campbell. During the parley, Campbell was provided with a seemingly impromptu tour of the Confederate camp. Unbeknownst to Campbell, as he completed the tour of a campsite, many of the

²⁹³ William Sherman, *Memoirs of General William T. Sherman*, 2nd ed. (New York: D Appleton and Company, 1904), 2:105; Basil Liddell Hart, *Sherman: Soldier, Realist, American* (New York: Dodd, Mead, and Company, 1929), 296.

²⁹⁴ The Editors of the Army Times, *The Tangled Web*, 17 – 22.

²⁹⁵ Liddell Hart, *Sherman*, 298.

²⁹⁶ The Editors of the Army Times, *The Tangled Web*, 21 – 22.

Confederate infantry from first campsites were portrayed by dismounted cavalry. After Campbell passed, the cavalry remounted and moved to other campsites to be counted again. Artillery pieces were similarly shuffled around, so Campbell was presented the image of a Confederate force four times its actual size. Rather than risk his men against this overwhelming force, Campbell surrendered the fort without further bloodshed.²⁹⁷ Though Forrest could have reduced the fort through traditional means, the deception both saved lives, and afforded Forrest the freedom of maneuver to turn his force on the Union relief column heading for the fort.

| | |
|--------------------------|--|
| Deception Objective (DO) | Union stronghold surrenders |
| Deception Target | Colonel Campbell |
| Deception Story (THINK) | Confederate force is overwhelming, so resistance is futile |
| Deception Events (SEE) | Portrayal – troops replicating additional forces |
| Termination Trigger | Surrender by Colonel Campbell |

Table 12. Deception Analysis of Athens, Georgia

C. PHILIPPINE INSURRECTION – RAID ON PALANAN

By February 1901, the United States had lost over four thousand Soldiers in two years of combatting insurrection on the Philippines island of Luzon, with no end in sight. The leader of the insurrection was Emilio Aguinaldo. Aguinaldo fought a classic guerrilla campaign, with his troops seemingly everywhere but himself nowhere to be found. On 8 February 1901, a U.S. Army brigade commanded by Colonel Frederick Funston captured one of Aguinaldo’s couriers with a message from Aguinaldo which “...ordered insurgent General Lacuna to send 200 soldiers from his brigade to Aguinaldo’s headquarters.”²⁹⁸ The courier revealed that the headquarters was located six miles inland at Palanan, in an isolated region of Luzon. As important as the location was the information that there were only 50 rebel troops guarding Aguinaldo.²⁹⁹ While Funston wanted to act on the

²⁹⁷ Dunnigan and Nofi, *Victory and Deceit : Dirty Tricks at War*, 124 – 125; John Weyth, *Life of Lieutenant-General Nathan Bedford Forrest* (New York and London: Harper and Brothers Publishers, 1905), 491 – 493.

²⁹⁸ Barton Whaley, “The One Percent Solution,” in *Information Strategy: A Guide to Theory and Practice*, edited by John Arquilla and Douglas Borer, 127 – 159 (New York and London: Routledge, 2007), 151.

²⁹⁹ Frederick Funston, *Memories of Two Wars* (London: Constable & Co., Limited, 1912) 384 – 389.

information, he knew there was no way for a large American force to reach Aguinaldo's lair without providing enough forewarning to give Aguinaldo opportunity to escape. Funston, not willing to let the opportunity to strike a hard blow to the insurrection, turned to deception.³⁰⁰ Funston in his memoir states:

So the only recourse was to work a stratagem, that is, to get to [Aguinaldo] under false colors. It would be so impossible to disguise our own troops that they were not even considered, and dependence would have to be placed on the Macabebes... As it would be absolutely essential to have along some American officers to direct matters and deal with such emergencies as might arise, they were to accompany the expedition as supposed prisoners who had been captured on the march, and were not to throw off that disguise until there was no longer necessity for concealment.³⁰¹

With approval from General MacArthur, Funston ordered 85 Macabebe troops to be outfitted with the weapons and uniforms of the insurgents. Funston and the four American Soldiers accompanying him were dressed as privates and pretended to be prisoners of the disguised Macabebe force. In addition to the disguises, Funston carried several pieces of Lacuna's personal stationery with his forged signature. These would be used to send messages from the insurgent leader to Aguinaldo legitimizing the arrival of the "reinforcements."³⁰² After a month's training for the Macabebe force, Funston's group set off for Palanan. The pseudo-operation worked exquisitely; when the force arrived in Palanan on March 26th, Aguinaldo was captured with only five casualties—all rebels.³⁰³ The forged letters played an essential role in the ruse with Aguinaldo admitting the letters were key to his letting his guard down and allowing the band into his camp.³⁰⁴ Shortly after Aguinaldo's capture, he ordered the end of the insurrection. Of the operation, Aguinaldo opined: "It was a bold plan, executed with skill and cleverness, in the face of difficulties which to most men would have seemed insurmountable."³⁰⁵

³⁰⁰ The Editors of the Army Times, *The Tangled Web*, 24.

³⁰¹ Funston, *Memories of Two Wars*, 393.

³⁰² The Editors of the Army Times, *The Tangled Web*, 24 – 25.

³⁰³ Bell, *Cheating*, 42 – 43.

³⁰⁴ Funston, *Memories of Two Wars*, 394.

³⁰⁵ As quoted in The Editors of the Army Times, *The Tangled Web*, 29.

It's interesting to note that while Funston's deception was a tactical and strategic victory, breaking the back of the insurgency; Funston was pilloried in American press, and even on the Senate floor for committing a war crime. Indeed, but current international law, Funston would be accused of perfidy for allowing the Macabebes to attack while wearing the enemy's uniforms.³⁰⁶

| | |
|--------------------------|---|
| Deception Objective (DO) | Allow entry of Funston's force into Aguinaldo's camp |
| Deception Target | Aguinaldo and rebel forces enroute to camp |
| Deception Story (THINK) | Funston's force is the requested reinforcements with prisoners |
| Deception Events (SEE) | Portrayal – Macabebe troops dressed as rebel troops Portrayal – Funston and other Americans as captured privates Disinformation – forged messages |
| Termination Trigger | On order after arrival into camp |

Table 13. Deception Analysis of Raid on Palanan

D. WORLD WAR I – SAINT MIHIEL

While a deception practitioner should seek to leverage existing target perceptions, there are times when this is impossible. For example, when the true objective is already perceived by the adversary to be the objective, reinforcing this perception would be—to say the least—counterproductive. In these cases, deception can be used to change the target's perception. General Pershing's use of deception in support of the assault on the Saint Mihiel salient during World War I demonstrates a successful execution of this scenario.

Pershing saw the reduction of the salient as a necessary step to winning the war; however, the German High Command fully expected an attack by American forces at Saint Mihiel. To increase the prospects of success, Pershing undertook a deception to make the German High Command believe the true focus of the American attack would be the Belfort Gap, 125 miles southeast of Saint Mihiel, with the deception goal of the German High Command shifting resources from Saint Mihiel. On 25 August, 1917, a French liaison officer informed the American press corps—off the record—that the American objective might be further to the South, perhaps the German town of Mulhouse that located on the other side of the Belfort Gap. Not surprisingly, this leak made it by military censors. On 27

³⁰⁶ The reaction in the U.S. to Funston's operation is discussed in detail in Chapter 3.

August 1917, General Pershing sent Major General Bundy, Commander VI Corps, to the town of Belfort on secret orders to plan for an offensive through the gap. Major General Bundy was an unwitting actor and took to his mission with alacrity. Soon American reconnaissance parties were seen around Belfort marking out locations for supply depots, field hospitals, and artillery positions. To create the impression of troop movements, radio sets from the 91st Infantry Division were used to mimic the transmissions of the VI Corps. The military preparations were reinforced with civil-military operations as pained efforts were made to ensure the local populace had evacuation plans. The crowning piece of disinformation supporting the deception was a piece of carbon paper discarded by Colonel Conger, Pershing's witting actor on the scene, in the waste basket of his hotel room in Belfort. Conger had used to carbon paper for a letter to the American Expeditionary Force Headquarters detailing the Belfort preparations as only needing an execution date. After depositing the carbon in the trash, Conger took a walk, and the German spies on the hotel staff did their part stealing the carbon.

In response to the deception, German High Command moved three divisions from Saint Mihiel to reinforce the Belfort Gap. With German perceptions changed and behavior suitably modified, Pershing's 12 September attack against the Saint Mihiel salient was a success. After the war, Colonel Conger received confirmation from the German commander at Belfort that when he requested the additional divisions he understood the buildup might be a ruse, but could not risk it being real. A deception using a minimum of resources was able to alter the perception of the German High Command in 19 days.³⁰⁷

| | |
|--------------------------|---|
| Deception Objective (DO) | German High Command shifts forces from Saint Mihiel |
| Deception Target | German High Command |
| Deception Story (THINK) | American Expeditionary Force plans on attacking through the Belfort Gap |
| Deception Events (SEE) | Demonstration – Major General Bundy Demonstration – reconnaissance parties Disinformation – leak to press Disinformation – Colonel Conger memorandum Portrayal – 91st Division creating radio traffic of VI Corps |
| Termination Trigger | Execution of attack on Saint Mihiel |

Table 14. Deception Analysis of Saint Mihiel

³⁰⁷ The Editors of the Army Times, *The Tangled Web*, 61 – 75.

E. DECEPTION IN WORLD WAR II

1. Operation FORTITUDE SOUTH

With an Allied invasion of Western Europe inevitable, the Allies sought to obscure the true landing site—Normandy. Operation FORTITUDE SOUTH sought to convince the Germans the true location of the invasion would be at Pas de Calais so that the German forces located there would not react to the Normandy landings. Fortitude South consisted of two phases. During phase I, the objective was to cause the German forces to make faulty troop dispositions by convincing German High Command that Pas de Calais was the true target for invasion, with a target date of 45 days after the Normandy landings. For phase II, the objective was to cause German High Command to keep the units in Pas de Calais in place. This was to be accomplished by convincing German High Command the Normandy landings were a diversionary feint, and that once the German reserves were committed at Normandy, the true invasion would take place.³⁰⁸ FORTITUDE SOUTH leveraged the existing German perception that Pas de Calais was the logical invasion choice.

The primary elements of FORTITUDE SOUTH were a simulated command and disinformation transmitted via the DOUBLE CROSS agents. The First U.S. Army Group [FUSAG] was a real headquarters without forces. General Patton was assigned as the FUSAG commander as part of the deception plan. FUSAG simulated and portrayed an army group through the use of decoys, dummies, and tasked units.³⁰⁹ Many of the simulated units assigned to FUSAG were not created for FUSAG; rather, they were part of a long running effort to inflate the Allied order of battle and had been used in previous deceptions. In addition to the simulated units, a number of real units were notionally assigned to FUSAG, while actually remaining under the command of the 21st Army.³¹⁰ Much of the information on the location, composition, and activities of FUSAG was fed to German intelligence through the DOUBLE CROSS system.³¹¹ Additional indicators were

³⁰⁸ Hesketh, *Fortitude*, 384.

³⁰⁹ Whaley, *Stratagem* (2007), 376 – 377.

³¹⁰ Hesketh, *Fortitude*, 174 – 185.

³¹¹ Hesketh, *Fortitude*, 174 – 185. Agents GARBO and BRUTUS were the primary channels used.

presented by radio nets portraying the notional units. The few German reconnaissance aircraft flying over the FUSAG simulation were fired upon for realism, but intentionally missed so the photos would make it back.³¹² As D-Day neared, additional events were staged in support of FORTITUDE SOUTH. Pas de Calais was included in the preparatory bombings to reinforce that it was the target.³¹³

After the successful landings at Normandy, FORTITUDE SOUTH was continued into July, until a sequel plan could be executed. The objective of Operation FORTITUDE SOUTH II was “To contain the maximum number of enemy forces in the Pas de Calais area for as long as possible.”³¹⁴ As elements notionally assigned to FUSAG arrived to reinforce the Normandy beachhead, local German commanders quickly realized the Pas de Calais threat was over; however, FORTITUDE SOUTH II convinced Hitler of the threat, keeping the German Fifteenth Army unable to respond to the growing threat in Normandy.³¹⁵ Elements of FORTITUDE SOUTH II remained in effect until the beginning of September.³¹⁶

| | |
|--------------------------|--|
| Deception Objective (DO) | Phase I – German forces commit to faulty troop distributions Phase II – German forces in Pas de Calais do not respond to Normandy landings |
| Deception Target | Hitler and German High Command |
| Deception Story (THINK) | Pas de Calais is the primary target of Allied efforts, the Normandy landings are a diversion |
| Deception Events (SEE) | Simulation – Decoy and dummy equipment Simulation – Radio traffic Portrayal – Assigned units Demonstration – Assignment of Patton as FUSAG Commander Disinformation – plans fed through DOUBLE CROSS agents Feint – Inclusion of Pas de Calais in preparatory bombing |
| Termination Trigger | Initially successful Normandy landings, extended via sequel |

Table 15. Deception Analysis of Operation FORTITUDE SOUTH

³¹² The Editors of the Army Times, *The Tangled Web*, 133 – 134.

³¹³ Whaley, *Stratagem* (2007), 377.

³¹⁴ Hesketh, *Fortitude*, 414.

³¹⁵ Hesketh, *Fortitude*, 267 – 268.

³¹⁶ Hesketh, *Fortitude*, 302.

2. 23rd Headquarters Special Troops

The 23rd Headquarters Special Troops was a purpose built unit specifically intended to conduct deception operations at the tactical level. The unit consisted of a Headquarters and Headquarters Company; the 603rd Engineer Camouflage Battalion (Special); the Signal Company (Special); the 402nd Engineer Combat Company (Special); and the 3132nd Signal Company (Special).³¹⁷ The 23rd utilized a variety of means to simulate or portray other army units to include: decoys, dummies, loudspeakers, pyrotechnics, and imitative radio transmissions. Furthermore, the 23rd employed disinformation—the 23rd called this “Special Effects—to corrupt the German perceptions of the Allied Order of Battle. “Special Effects” included the wear of other unit’s patches, stenciling vehicles with other unit designations, creating phony generals, and crafting fictional stories; all to be picked up by the German agent networks operating behind Allied lines.³¹⁸

The techniques implemented by the 23rd played a vital role in operations throughout the campaign in Western Europe by depriving German intelligence of the true picture of Allied force dispositions. In particular, the 23rd played a critical role in the relief of Bastogne during the Battle of the Bulge. The objective of Operation KODAK was:

To confuse German radio intelligence as to the real location of the 80th Infantry Division and the 4th Armored Division, both of which were committed to action in a counterattack against the south flank of the St. Vith-Bastogne salient, by giving radio indication of those Divs in an area to the southeast of that in which they were employed. The area chosen for the radio deception was such as to indicate their presence as a reserve in case of extension [*sic*] of the German counterattack through Echternacht.³¹⁹

The surprise arrival of two divisions of reinforcements broke the back of the siege of Bastogne.³²⁰

³¹⁷ *Official History of the 23rd Headquarters Special Troops*, 2 – 3.

³¹⁸ *Official History of the 23rd Headquarters Special Troops*, 8 – 9.

³¹⁹ *Official History of the 23rd Headquarters Special Troops*, 42.

³²⁰ Gerard, *Secret Soldiers*, 232 – 233.

| | |
|--------------------------|--|
| Deception Objective (DO) | |
| Deception Target | Field Marshall von Rundstedt – German commander outside Bastogne |
| Deception Story (THINK) | The 4th Armored Division and 80th Infantry Division were being held in reserve |
| Deception Events (SEE) | Portrayal – Radio traffic by 23rd Securing – Radio silence by actual units |
| Termination Trigger | Arrival of the 4th and 80th at Bastogne |

Table 16. Deception Analysis of Operation KODAK

3. Operation WEDLOCK

In 1943, Joint Security Control—the staff element of the Joint Chiefs of Staff charged with coordinating U.S. strategic deception—directed Lieutenant General Simon Bolivar Buckner Jr., the commander of the Alaska Department to develop a strategic plan for the North Pacific. The objective given Buckner was:

...to deceive the Japanese about US plans for Alaska and the Aleutians by exaggerating current American forces and their activities there, and more specifically, to convince the Japanese of a build-up intended to invade the Kurile Islands. Tentatively this fictional assault was first slated for 1 August 1944.³²¹

Buckner's initial plan was altered after consultation with Admiral Nimitz. Nimitz assumed command of the strategic aspects of the deception, while Buckner retaining command of the tactical aspects. Nimitz also accelerated the target date for the assault to 15 June so as to provide cover for Operation FORAGER, the planned real assault on Saipan. The revised deception plan became Operation WEDLOCK. In order to present the appearance of increased U.S. preparations for the invasion of the Kurile Islands, WEDLOCK called for the simulated activation of the 9th Amphibious Force consisting of five U.S. and one Canadian division. Additionally, the 9th Fleet would be notionally increased in size in order to support the assault. To create the simulated radio traffic necessary for these formations, a joint communications center was established.³²²

³²¹ Katherine Herbig, "American Strategic Deception in the Pacific," in *Strategic and Operational Deception in the Second World War*, edited by Michael Handel, 260 – 300, (London: Frank Cass, 1987), 266.

³²² Herbig, "American Strategic Deception," 266 – 267.

In addition to the notional forces, WEDLOCK included a number of other deception events in support of the story. WEDLOCK coopted the American press—ULTRA intercepts confirmed that Japanese intelligence used the press as a means of collection. Rather than keeping the meeting between Buckner and Nimitz a secret, the press was encouraged to report the meeting and speculate on its meaning. In addition, Joint Security Control fed disinformation directly to Japanese intelligence through double agents in the U.S.; via military attaches in neutral countries; and by incorporating disinformation into shared intelligence with Russia—expecting the disinformation to be collected by Japanese agents. Furthermore, troops embarking for the tropics through Seattle were issued arctic gear so as to appear that they were heading north. Finally, an entire simulated airbase was constructed at Holtz Bay on the westernmost Aleutian island.³²³

After the invasion of Saipan was completed, it was decided to maintain aspects of the WEDLOCK deception, specifically the simulated divisions. Therefore, a sequel plan was implemented under the name Operation HUSBAND. Operation HUSBAND was later followed by another sequel plan, Operation BAMBINO, which in turn was eventually followed by Operation VALENTINE. Each of the sequel plans maintained the simulated forces, though with less and less effort in maintaining the deception. As a result, the Japanese Imperial Command over time withdrew ships and planes from the Kurile Islands to meet more imminent threats; however, the troop levels remained steady throughout the series of deceptions.³²⁴

The effect of WEDLOCK can be seen in Japanese troop strengths in the Kurils. Whereas there were initially 25,000 troops and 38 aircraft stationed in the Kurils before WEDLOCK, after WEDLOCK the garrison had grown to 70,000 troops and 590 aircraft.³²⁵ However, while WEDLOCK succeeded in convincing the Japanese of a serious threat from the North:

³²³ Herbig, “American Strategic Deception,” 270 – 272.

³²⁴ Herbig, “American Strategic Deception,” 279 – 281.

³²⁵ Milan Vego, *Joint Operational Warfare* (Newport, RI: United States Naval War College, 2007), VII-103 – VII-105, as cited in Leonard Wells, “Military Deception: Equivalent to Intelligence, Maneuver and Fires” (Paper, Navy War College, 2008), accessed 20 May 2012, <http://handle.dtic.mil/100.2/ADA494225>, 9 – 10.

...it failed to convince him that this menace was immediate or of primary importance. Rather than misleading the Japanese into reordering their priorities for the threats which faced them, the deception added another plausible threat to an already ambiguous situation.³²⁶

While not as successful as desired, WEDLOCK could be classified as good enough.

| | |
|--------------------------|--|
| Deception Objective (DO) | Japanese shift forces to defense of Kurile Islands |
| Deception Target | Japanese Imperial Command |
| Deception Story (THINK) | U.S. intends to liberate Kurile Islands from Japanese occupation |
| Deception Events (SEE) | Portrayal – increased size of the 9th Fleet Portrayal – Troops issued arctic gear Simulation – radio traffic Simulation – 9th Amphibious Force Disinformation – Press stories Disinformation – Double agent network Disinformation – Military attaches Disinformation – Russia information exchange |
| Termination Trigger | |

Table 17. Deception Analysis of Operation WEDLOCK

F. KOREAN WAR – INCHON LANDING

In 1950, General MacArthur approved Operation CHROMITE, an audacious plan to conduct an amphibious assault at Inchon to break the impasse with North Korean forces to the South. To conduct the operation, General MacArthur directed the formation of X Corps under the command of Major General Edward Almond, General MacArthur's Chief of Staff. As cover for the preparations for Operation CHROMITE, Major General Edward Almond remained as the Chief of Staff, while the staff for X Corps was formed as the Special Planning Staff, and the forces assigned to X Corps were carried as GHQ reserves.³²⁷

Since it was impossible to camouflage the amphibious assault preparations, a deception plan was needed to mislead the North Korean People's Army [NKPA] command as to the true point of decision. A multi-faceted effort was undertaken to mislead the NKPA command into believing the port city of Kunsan as the actual target so

³²⁶ Herbig, "American Strategic Deception," 275.

³²⁷ *Headquarters X Corps War Diary Summary for Operation Chromite: 15 August to 30 August 1950* (1950), accessed 24 January 2012, <http://cgsc.cdmhost.com/utls/getfile/collection/p4013coll11/id/831/filename/832.pdf>, 2.

the NKPA would not disrupt the actual landing. Kunsan, located one hundred miles to the south of Inchon, was a likely target for assault—it had been one of the three courses of action during planning. First, Kunsan was given particular attention during the preparatory bombing operations, to include a massive operation four days prior to the Inchon landing. Second, the 1st Marine Division was publicly given briefings on the hydrology at Kunsan. Third, an amphibious feint/portrayal was conducted at Kunsan using an ad hoc special operations element, whose purpose was to create the perception of a much larger force.³²⁸ Additionally, the 1st Marine Brigade, which was the primary landing force at Inchon, was assigned to the Pusan ‘general reserve’ in an effort to blend it in with other less essential units.³²⁹ In order to add a bit of ambiguity to the situation, similar efforts—preparatory naval bombardments—were made for Samch’ok, a plausible amphibious landing objective on the east coast of the peninsula.³³⁰ The Inchon landing could not have succeeded without the operational surprise created by the deception plan.

| | |
|--------------------------|---|
| Deception Objective (DO) | North Korean forces do not disrupt Inchon landing |
| Deception Target | North Korean People’s Army command |
| Deception Story (THINK) | Actual amphibious landing will occur at Kunsan or Samch’ok |
| Deception Events (SEE) | Feint/Portrayal – Special Operations Company landing at Kunsan Feint – Kunsan focus of major bombing attack at D-4 Feint – Samch’ok focus of preparatory naval bombardment Demonstration – public briefing on hydrology at Kunsan Blending – preparatory bombings at Inchon blended into larger bombing operation Blending – assault element assigned to the Pusan ‘general reserve’ Blending - Major General Almond remaining Chief of Staff |
| Termination Trigger | |

Table 18. Deception Analysis of Operation CHROMITE

³²⁸ Whaley, *Stratagem* (2007), 448.

³²⁹ George Womack, “Operational Deception and the Principles of War” (Paper, Naval War College, 1994), accessed 20 May 2012, <http://handle.dtic.mil/100.2/ADA279632>, 13.

³³⁰ *Reference Book 31-40: Techniques for Deception*, 6-8.

G. VIETNAM WAR

1. MACVSOG

a. *Sacred Sword Patriots League*

When MACVSOG was established in 1964, one of the objectives in OPLAN 34A was to “create the impression that an active, unified, internal opposition exists in North Vietnam.”³³¹ OPLAN 34A directed the creation of an impression because MACVSOG was prohibited by policy decisions made in Washington from implementing an actual unconventional warfare campaign in North Vietnam.³³² As a result, MACVSOG implemented a complex deception program to create the perception of a growing and active underground movement with the objective of forcing the North Vietnamese government to withdraw support for the Viet Cong. The notional resistance movement was part of Project HUMIDOR, MACVSOG’s psychological operations program.³³³ The centerpiece of MACVSOG’s plan was the Sacred Sword Patriots League [SSPL]. The SSPL was presented as an anti-foreign power, Vietnamese nationalist party with its roots in the anti-colonial struggles against the French.³³⁴

The SSPL deception was supported by a number of operations. First, North Vietnamese fishermen captured as part of MACVSOG’s maritime operations were taken to

³³¹ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Appendix A Summary of MACSOG Documentation Study* (Washington, DC: Joint Chiefs of Staff, 1970), accessed 2 September 2011, http://www.dod.gov/pubs/foi/International_security_affairs/vietnam_and_southeast_asiaDocuments/520-22.pdf, a-18.

³³² Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Annex A to Appendix C Psychological Operations* (Washington, DC: Joint Chiefs of Staff, 1970), accessed 2 September 2011, http://www.dod.gov/pubs/foi/International_security_affairs/vietnam_and_southeast_asiaDocuments/520-1.pdf, C-a-7 to C-a-13. MACVSOG attempted on three separate occasions between 1965 and 1968 to gain approval to execute an actual unconventional warfare plan against North Vietnam.

³³³ John Plaster, *SOG: The Secret Wars of America’s Commandos in Vietnam* (New York: Penguin Group, 1998), 125.

³³⁴ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Annex A to Appendix C Psychological Operations*, C-a-14 to C-a-15. The sacred sword was a reference to a Vietnamese legend about a heaven-sent sword used by Le Loi during his nationalist campaign to drive the Chinese from Vietnam in the 15th Century. The SSPL story reflects an exceptional attention to detail with regards to the targeted culture. See Shultz, *Secret War*, 139 – 14.

the Paradise Island facility that portrayed an active SSPL camp.³³⁵ While the fishermen were subjected to SSPL indoctrination, the primary objective was not to actually turn the fishermen into operatives; rather:

The primary objective of capturing prisoners and leading them to believe that they were captives of the SSPL was to establish credibility for the organization and convince elements of the populace of [North Vietnam] that an opposition organization does exist in [North Vietnam].³³⁶

In addition to the Paradise Island facility, support for the SSPL deception included the Voice of the Sacred Sword Patriots League, a portrayed radio station ran by MACVSOG's psychological operations element, and leaflet drops of SSPL propaganda.³³⁷

While the SSPL program did not achieve its primary objective of forcing the North Vietnamese government to stop or reduce support for the insurgency in the South, the program was effective at forcing the North Vietnamese government to increase internal security measures. A study of North Vietnam's response to covert operations, concluded that "Hanoi interprets allied special operations in North Vietnam as a major facet in the US strategy. As such it views these operations with considerable alarm."³³⁸ Additionally, the end to all covert activities in North Vietnam was included in the initial 'price for peace' demands by the North Vietnamese contingent at the Paris peace talks.³³⁹ The SSPL program was effectively ended with the 1 April 1968.³⁴⁰

³³⁵ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Annex A to Appendix C Psychological Operations*, C-a-40.

³³⁶ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Annex A to Appendix C Psychological Operations*, C-a-62.

³³⁷ Shultz, *Secret War*, 142 – 144.

³³⁸ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Annex A to Appendix C Psychological Operations*, C-a-129

³³⁹ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Annex A to Appendix C Psychological Operations*, C-a-110. Additionally, Ho Chi Minh issued several directives aimed specifically at suppressing internal dissent.

³⁴⁰ Special Assistant for Counterinsurgency and Special Affairs (SACSA), *Draft MACSOG Documentation Study Annex A to Appendix C Psychological Operations*, C-a-40.

| | |
|--------------------------|--|
| Deception Objective (DO) | North Vietnam reduces support to South Vietnamese insurgency |
| Deception Target | Ho Chi Minh and North Vietnam leadership |
| Deception Story (THINK) | The SSPL is an active resistance movement challenging the Communist government of North Vietnam |
| Deception Events (SEE) | Portrayal – Paradise Island operations Disinformation – SSPL radio station and leaflet drops |
| Termination Trigger | Since deception was in support of the overall campaign there was no defined termination trigger. Termination occurred in response to North Vietnamese negotiation demands. |

Table 19. Deception Analysis of SSPL

b. Deception in Support of Security

In addition to the SSPL program, MACVSOG utilized deception in support of a robust organizational security program. As part of the security program, MACVSOG, as well as all the major subordinate components, had an official cover story in an attempt to disguise the true nature of the organization. The official cover story for MACVSOG was:

Studies and Observations Group (SOG): “Studies and Observations Group is a special staff section of Headquarters, United States Military Assistant [sic] Command, Vietnam (USMACV) under the supervision of the Chief of Staff, USMACV. It is responsible for the study an observation of joint or combined counterinsurgency operations of a comprehensive nature. The studies and observations include intelligence and psychological activities as well as combat actions that may involve any forces or resources of any service of the Republic of Vietnam Armed Forces (RVNAF) and USMACV. SOG is not an implementing agency, the operations it studies and observes are conducted by the RVNAF commands which have responsibility for the areas of observations.”³⁴¹

In addition to the overarching cover stories, individual missions were given cover stories. For example, if an aircraft conveying agent teams or equipment between South Vietnam and Thailand had an incident necessitating an explanation for the mission, the explanation was that the aircraft was diverted from routine operations in South Vietnam in order to respond to a distress call.³⁴²

³⁴¹ Special Assistant for Counterinsurgency and Special Affairs, *Draft MACSOG Documentation Study Appendix H Security, Cover & Deception*, H-10.

³⁴² Special Assistant for Counterinsurgency and Special Affairs, *Draft MACSOG Documentation Study Appendix H Security, Cover & Deception*, H-12.

| | |
|--------------------------|---|
| Deception Objective (DO) | Ignore MACVSOG |
| Deception Target | Everyone without need-to-know |
| Deception Story (THINK) | MACVSOG is a staff element used to collect data, not an operational headquarters |
| Deception Events (SEE) | Disinformation – cover stories |
| Termination Trigger | Since deception was in support of the overall campaign there was no defined termination trigger |

Table 20. Deception Analysis of MACVSOG Security

2. MACV

Elements of the Military Assistance Command, Vietnam (MACV) utilized deception in their operations against the Viet Cong and the North Vietnamese Army. In one case, the 25th Infantry Division learned of an inexperienced NVA regiment with orders to seek out an allied base as a way of building experience and morale. At the recommendation of the division staff, the commander of the 25th decided to provide the enemy with a suitable target. In February 1969, an infantry company established firebase DIAMOND I in the vicinity of the enemy force. What the NVA saw as a vulnerable target was in reality ringed with sensors and ground radar systems, and supported by three artillery support bases and air support. When the NVA decided to attack the firebase the sensor array deprived the NVA of surprise. Supported by the artillery bases and air support, the firebase repulsed two attacks with minimal casualties, while the NVA regiment was decimated. This stratagem was repeated by the 25th Infantry Division with at three additional firebases with similar successes. Repetition of the stratagem was achievable because establishing new firebases was a routine occurrence. While using troops as bait may seem distasteful, the stratagem was effective; moreover, by establishing DIAMOND I, the 25th Infantry Division was able to influence the NVA into attacking on the 25th's terms. The alternative would have meant allowing the NVA force to attack any one of a number of bases.³⁴³

In analyzing this deception, it is interesting to note that the deception was not the force, rather the purpose of the force. As the report noted, had the NVA not acted on the

³⁴³ *Reference Book 31-40: Techniques for Deception*, 6-16.

deception, the unit was still available to conduct patrolling operations.³⁴⁴ The deception goal was to incite the NVA to attack a specific firebase in order to neutralize the threat. The deception story was that the DIAMOND firebases were just more of many firebases, but conveniently located for attack: a variation of cry-wolf with an element of honeypot.

| | |
|--------------------------|---|
| Deception Objective (DO) | NVA attacks DIAMOND firebases |
| Deception Target | NVA leadership in 25th Infantry Division area of operations |
| Deception Story (THINK) | DIAMOND firebases are perfectly positioned for NVA attack |
| Deception Events (SEE) | Portrayal – DIAMOND as typical firebase |
| Termination Trigger | On order once threat around firebase was disrupted |

Table 21. Deception Analysis of DIAMOND I

In another example, prior to an attack on a Viet Cong (VC) stronghold, a ranger battalion conducted operations with heavy artillery support leading away from the VC base area. At the same time an Army of the Republic of Vietnam (ARVN) battalion similarly conducted operations moving away from the stronghold. After the feints were completed, the Ranger and ARVN troops were airlifted back to attack the stronghold. A prisoner captured during the assault on the stronghold indicated that the Ranger and ARVN battalion's movements lulled the VC into believing the base area was not the target of the operation. Usually feints are used to draw enemy forces away from the decisive point, but knowing how the enemy will react allowed the feints to achieve the opposite result. In this case, the feints of the Ranger and ARVN battalions were successful in convincing the VC to remain at the decisive point.³⁴⁵

| | |
|--------------------------|---|
| Deception Objective (DO) | VC force remains at the stronghold |
| Deception Target | VC stronghold commander |
| Deception Story (THINK) | It is safe to remain at the stronghold because the Ranger and ARVN battalions do not know about it |
| Deception Events (SEE) | Feint – Ranger battalion operation moving away from stronghold Feint – ARVN battalions operation moving away from stronghold Simulation – additional camp fires |
| Termination Trigger | Assault on stronghold |

Table 22. Deception Analysis of Ranger Assault

³⁴⁴ *Reference Book 31-40: Techniques for Deception*, 6-17.

³⁴⁵ Headquarters, U.S. Military Assistance Command, Vietnam, *Combat Experiences 2-69* (San Francisco: Headquarters, U.S. Military Assistance Command, Vietnam, 1969), accessed 11 July 2011, <http://handle.dtic.mil/100.2/AD0504303>, 3.

H. OPERATION DESERT STORM

Operation DESERT STORM provides an exemplar of how the concepts of deception work together to achieve the desired effect. According to General Schwarzkopf, Coalition forces implemented the “Hail Mary” plan because unfavorable force ratios—the Iraqi forces in Kuwait had numerical superiority and were in the defensive—precluded a frontal assault. Therefore, the flanking maneuver was essential for countering the Iraqi force advantage.³⁴⁶ Deception became key to distracting Saddam from the “Hail Mary” preparations:

The goal of the deception was to convince the Iraqis that the main attack would come up Wadi Al Batin along the Kuwaiti-Iraqi western border. This attack would be supported by an amphibious attack from the northern Gulf and attacks directly into the defenses along the southern Kuwaiti border. The desired effect was to hold the RGFC and the professional army, the regular armor and mechanized divisions, oriented upon the Wadi and coast. This disposition would expose them to the VII and XVIII Airborne Corps enveloping maneuver and facilitate their destruction.³⁴⁷

This deception plan played to Saddam’s expectations, as early intelligence reports indicated a concern about amphibious operations and a belief that an attack through the desert was impossible.³⁴⁸

The first step of the deception plan was the removal of Saddam’s primary channel for intelligence—the Iraqi Air Force.³⁴⁹ Prior to the start of the air campaign, reconnaissance and logistical preparations for the envelopment were prohibited, with all activity limited to reinforcing the perception of the main effort coming through Wadi Al Batin. In response to the staging of forces at the mouth of the wadi, Iraqi forces reinforced their positions on the other side. Within the assembly areas, “Virtually every division constructed replicas of Iraqi defensive positions and conducted extensive

³⁴⁶ H. Norman Schwarzkopf, “Central Command Briefing,” *Military Review*, 71, no. 9 (September 1991): 96 – 97.

³⁴⁷ Breitenbach, “Operation Desert Deception,” 2 – 3.

³⁴⁸ Breitenbach, “Operation Desert Deception,” 10 – 11.

³⁴⁹ Schwarzkopf, “Central Command Briefing,” 97.

training against them.”³⁵⁰ The press pool was allowed access to report on this training, but not to the maneuver training necessary for the flanking maneuver. Once the air campaign was started, and the threat of the Iraqi Air Force removed, VII Corps and XVIII Corps moved from their staging areas south of Wadi Al Batin to their new staging areas in the western desert. As a security measure for the movement, and to maintain the illusion that the two Corps were still in place, other units still located in the original staging areas portrayed the XVIII Corps using false radio traffic.³⁵¹

Portraying a secondary effort, the II Marine Expeditionary Force conducted several amphibious training exercises, including Operation IMMINENT THUNDER. These demonstrations had the intended effect of causing seven Iraqi divisions to shift to the Kuwaiti Coast.³⁵² The press was given access to cover these amphibious training operations as well, providing another channel to Saddam on the Coalition’s intent to conduct an amphibious landing.³⁵³ The amphibious demonstrations were further reinforced by PSYOP leaflets showing a tidal wave shaped like a Marine washing over Iraqi soldiers.³⁵⁴ On the morning of 24 February, SEAL Task Force Mimke conducted an amphibious feint, supported by naval gunfire, to reinforce the threat of landings in order to prevent the reallocation of the Iraqi divisions on the coast.³⁵⁵

The deception operations may have worked a little too effectively. When the 1st Cavalry Division launched its feint on 24 February through Wadi Al Batin, it met little resistance. The Joint Forces Command East and I Marine Expeditionary Force similarly met little resistance along the coast. The Iraqi forces were so concerned with being flanked by an amphibious landing they had withdrawn forty kilometers north. The quick advance of these forces necessitated the launch of the Hail Mary eighteen hours early.

³⁵⁰ Breitenbach, “Operation Desert Deception,” 5.

³⁵¹ Breitenbach, “Operation Desert Deception,” 5.

³⁵² Breitenbach, “Operation Desert Deception,” 4.

³⁵³ Schwarzkopf, “Central Command Briefing,” 102. It’s important to note that the press were not actively deceived or given disinformation to publish. They were afforded the opportunity to observe actual training and allowed to draw their own conclusions and report on it as they saw fit.

³⁵⁴ Herbert Friedman, “Leaflets of Operation Desert Shield and Desert Storm,” accessed 25 May 2012, <http://www.psywarrior.com/HerbDStorm.html>.

³⁵⁵ Breitenbach, “Operation Desert Deception,” 7.

The rapid withdraw of Iraqi forces and the resultant rapid advance of Coalition forces into Kuwait sufficiently upset the operation's synchronization that Schwarzkopf and his ground commanders were forced to sacrifice some initiative in order to reset synchronization.³⁵⁶

| | |
|--------------------------|---|
| Deception Objective (DO) | Iraqi forces concentrate away from "Hail Mary" flanking movement |
| Deception Target | Saddam |
| Deception Story (THINK) | Coalition main effort will come through Wadi Al Batin with supporting amphibious landing |
| Deception Events (SEE) | Demonstration – 1st Cavalry Division entry into Wadi Al Batin Demonstration – II Marine Expeditionary Force's amphibious training Demonstration – Training facilities in the assembly areas Disinformation – PSYOP using amphibious imagery Portrayal – Radio traffic of XVIII Corps Blending – Radio silence by XVIII Corps |
| Termination Trigger | On order |

Table 23. Deception Analysis of Operation DESERT STORM

³⁵⁶ Breitenbach, "Operation Desert Deception," 21 – 25.

THIS PAGE INTENTIONALLY LEFT BLANK

VII. CONCLUSIONS AND RECOMMENDATIONS

As a nation we are bred up to feel it a disgrace even to succeed by falsehood... we will keep hammering along with the conviction that 'honesty is the best policy,' and that truth always wins in the long run. These pretty little sentences do well for a child's copy-book, but the man who acts upon them in war had better sheathe his sword forever.

– Colonel Sir Garnet Wolseley³⁵⁷

A. CONCLUSION

Deception has demonstrated its utility in the exercise of war since the dawn of recorded history. Even within the more limited scope of U.S. Army operations, deception has proven its worth time and again, from helping to save the Continental Army from sure destruction during the Revolutionary War to assisting in the rapid and complete defeat of a numerically superior foe during Operation DESERT STORM. Likewise, deception has proven its worth against conventional foes such as the German and Iraqi Armies, and against irregular foes like the Viet Cong and the Philippine insurgents. Given the demonstrated worth of deception across the spectrum of operations and against myriad opponents, it is unacceptable to see the lack of emphasis given deception in current Army doctrine.

The level of emphasis of deception within U.S. Army doctrine has waxed and waned between 1905 and 2012. A number of explanations for this fluctuation have been presented, e.g., morality, the American style of war, and a professional officer class. The fluctuation is perhaps best explained by the perceived balance of power with the nation's adversaries and the resultant leaning towards either the cumulative destruction or systemic disruption styles of war. When the U.S. Army perceives it has a force advantage—as has been the case since the end of the Cold War—then weight is given towards cumulative destruction, while systemic disruption and deception wanes. Conversely, when the U.S. Army perceives a force disadvantage—as was the case during World War II and the period of the 1970s through Operation DESERT STORM—then

³⁵⁷ Garnet Wolseley, *The Soldier's Pocket-book for Field Service*, 2nd ed. (London and New York: MacMillan and Co., 1871), 81.

weight is given systemic disruption and deception, while cumulative destruction wanes. If this is indeed the case, then the emerging era of austerity and economy of force roles would seem to suggest a shift towards systemic disruption and with it deception is in the offing. Furthermore, since balance of power ratios are essentially meaningless against adversaries relying on heavily systemic disruption approaches—e.g., Al Qaeda and other non-state actors—deception would appear to be of increased utility. However, the most recent capstone doctrine publications *ADP 3-0 and ADRP 3-0* between them have a single bullet point mentioning deception without elaboration.³⁵⁸ As the U.S. Army seeks to do more with less, it must take to heart Whaley’s observation about the cost of deception:

Stratagem is cheap. It requires a very small initial investment of men and materiel. Effective stratagem can be the part-time work of only one man, particularly if he is the commander. And the most elaborate of such operations involved only diverting for a few weeks the services of several hundred men, a dozen or so small boats, a few aircraft, a fair amount of radio and other electronic gear, some wood, canvas, and paint, and bits of aluminum scrap. None of this was permanently lost to inventory, except the aluminum.³⁵⁹

B. RECOMMENDATIONS

What follows are some recommendations the U.S. Army should adopt to address the current shortfall of deception emphasis within doctrine and operations. These recommendations are an economy of force middle ground between the current doing nothing, and the actions of a resource rich U.S. Army. If resources and personnel were as effectively unlimited as they were in World War II, these recommendations would include a call for purpose built deception support battalions—modern versions of 23rd Headquarters Special Troops. However, this recommendation is unfeasible in the current fiscal and force cap environment, thus the recommendations focus on increasing the capabilities of existing units and personnel.

³⁵⁸ Headquarters, Department of the Army, *Army Doctrine Reference Publication 3-0: Unified Land Operations* (Washington, DC: Department of the Army, 2012), 3-2; Headquarters, Department of the Army, *FM 100-5, 1954*, 37.

³⁵⁹ Whaley, *Stratagem* (1969), 232.

1. Doctrine

“Capstone doctrine establishes the Army’s view of the nature of operations, the fundamentals by which Army forces conduct operations, and the methods by which commanders exercise mission command;” therefore, in order for deception to be fully integrated into U.S. Army operations, deception must be fully integrated into U.S. Army doctrine.³⁶⁰ The current single bullet guidance in *Army Doctrine Reference Publication 3-0: Unified Combat Operations* of “conduct military deception” without further elaboration must change to something along the lines of the guidance in *FM 100-5* (1954), which stated: “It is imperative that commanders constantly realize the importance of combat deception and that they train their troops and staff in the techniques and planning for combat deception.”³⁶¹

To achieve full integration of deception within Army doctrine, an office dedicated to the proponentcy of military deception must be created at either the Mission Command Center of Excellence or the Special Warfare Center and School. The office must have the single mission of proponentcy for deception, because prior history indicates that deception suffers when it is a secondary task. This office must have the mandate for active military deception and coordination authority with the proponents for the cover aspects of deception, e.g., camouflage, OPSEC, and counterintelligence. In addition to coordination authority, the deception office must be incorporated into the approval process for doctrine related to the covering aspects of deception so as to ensure unity of effort in the presentation of deception doctrine. Finally, all formal education on active deception must be either consolidated under the auspices of, or the programs of instruction approved by, the deception office; again to ensure unity of effort and message.

In the development of deception doctrine, the focus should be on theory with illustrative examples illuminating the theory in an operational context. The purpose of the doctrine should be to spark creative thought on how deception might be practiced, not to dictate how deception is practiced. Additional emphasis should be given to the

³⁶⁰ Headquarters, Department of the Army, *Army Doctrine Publication 3-0*, 1.

³⁶¹ Headquarters, Department of the Army, *Army Doctrine Reference Publication 3-0*, 37.

information requirements needed to develop a full understanding of the target. Particular care must be taken to ensure that doctrine does not prescribe particular techniques or template approaches; a doctrinaire or dogmatic approach would create the potential disastrous situation of predictable deception.

2. Leadership, Education, and Training

Integration of deception into U.S. Army operations demands that leaders embrace the potential of deception as part every operation. There are two ways to inculcate a respect for the utility of deception in leaders. First is for senior leaders at the upper echelons of the U.S. Army to direct deception integration into all training operations as a forcing function, especially at the combined arms training centers. Commanders who are accustomed to integrating deception into field training exercises beginning during the formative stages of their careers will be more apt to integrate deception into actual operations. Care must be exercised to ensure that the integration of deception into training does not degenerate into a templated, predictable process, as the use of variety is an essential factor in deception success.

Second is for leaders at the lowest echelon practical to receive formal education in deception (Table 24). As the earlier a leader is trained and aware of the utility of deception the more likely deception will be integrated into the leader's planning methodology. Additionally, the educating and implementing at the lowest levels helps to ensure that as personnel advance, their experience with deception advances as well. If company commanders receive formal education on deception, then as they move up into senior leadership and staff positions they will carry the education with them, so that the majority of staff members from battalion and up will have training and experience in deception. The combination of the top down forcing function coupled with the bottom up education will serve to inculcate the idea of deception in the force more thoroughly than either approach by itself. This will help to bring the situation described in 1941 *Field Service Regulations of Operations* to fruition:

A commander who is ingenious and resourceful in the use of tactical strategems [*sic*] and ruses often will find methods of deceiving or misleading the enemy and of concealing his own intentions.³⁶²

As with deception doctrine, formal deception education should focus on the theory of deception, especially the target's decision-making process, and the concepts of biases, schemata, and heuristics. In addition to theory, formal education should include an emphasis on the information requirements for profiling potential targets. Illustrative examples drawn from prior uses of deception should be used to illuminate the theory within an operational context, but not as examples of "how to conduct" deception. What must be avoided in the formal education are any deception planning templates or guides that could result in a dogmatic approach to deception.

| Organization | Echelon | Minimum | Optimum (In addition to minimum) |
|---|-------------------------|--|---|
| General Purpose Forces | Corps/Division | Commander G3 G2 G5 | Deputies G3/NCOICs MISO OIC / NCOIC Inform and Influence OIC |
| | Brigade/Battalion | Commander S3 S2 S3 Plans | Command Sergeant Major S3/S2 NCOICs Inform and Influence OIC MISO NCOIC |
| | Company | Commander | First Sergeant Platoon Leaders Platoon Sergeants |
| Special Forces | Group/Battalion | Commander S3 S2 S5 Battalion Operations Warrant | Assistant S3 / S2 Command Sergeant Major S3/S2 NCOICs |
| | Company | Commander Company Operations Warrant | Company Operations Sergeant Major Operations Sergeant Operations/ Intelligence Sergeant |
| | Detachment | Asst Detachment Commander Operations/ Intelligence Sergeant | Detachment Commander Operations Sergeant |
| Military Information Support Operations | Command/Group/Battalion | Commander S3 S2 | Deputy Commander S3/S2 Deputies Command Sergeant Major S3/S2 NCOICs |
| | Company | Commander | First Sergeant |
| | Detachment | OIC | NCOIC |
| | Team | NCOIC | |

Table 24. Recommended Personnel for Formal Deception Education

³⁶² War Department, *Field Service Regulations of Operations*, 1941, 58.

3. Personnel Selection

The personnel holding the positions in Table 24 are the recommended recipients of formal deception education; however, this should not be interpreted as saying these personnel are the only ones involved in deception planning. Depending on the deception plan, other personnel may be needed, e.g., developing a notional order of battle will require a witting actor in the personnel section. Additionally, the fact a person occupies a position indicated in Table 24 does not imply the person is cut out for deception planning; more important than either the rank or the position are the personal characteristics of a deception planner. Deception planning requires a certain type of strategic thinker who has initiative and is creative, intelligent, mentally agile, and security conscious. A deception planner does not need to be “immoral” or “morally flexible;” rather, a planner needs to be able to set aside personal considerations for the accomplishment of the mission. Lieutenant Colonel Simenson, the operations officer for 23rd Headquarters Special Troops, was personally against the use of deception, but he did not let his personal feelings interfere with the mission.³⁶³ That said, a person who is unable to set aside personal feelings on deception is best left as an unwitting actor.

A commander may feel the need to reach outside his staff for the best candidate; much like General Wavell requested Dudley Clarke by name to head up British deception efforts in North Africa during World War II.³⁶⁴ Regardless of whom the commander chooses to lead his deception planning, the planner must be assigned to the unit. It is unrealistic and counterproductive to expect an outside element to assume deception planning for a unit. First, delegating responsibility to an outside element undermines the integration of deception into unit training and operations; when the outside element is not present during routine field training exercises neither is deception. Second, attaching a deception planning function serves to inhibit the growth of an organic capacity for deception within the unit by absolving the supported commander and staff of the planning responsibility. The commander responsible for the overall mission must also plan and execute the supporting deception stratagem.

³⁶³ Gerard, *Secret Soldiers*, 85.

³⁶⁴ Mure, *Master of Deception*, 58.

4. Facilities

Deception planning requires a segregated facility in order to control access to the deception plan. The segregated facility can be as simple as a lockable room to secure compartmentalized information. The critical requirement is that the facility is commensurate with the level of classification of the plan and supporting resources. At the same time, the deception planner cannot work in complete isolation from the rest of plans and operations. In order to ensure the deception plan is fully nested in the supported plan, the deception planner must also be physically integrated into overall operations planning, and therefore also needs to have a space that is connected to the plans space.

C. FINAL NOTE

As a final word of caution, the deception practitioner must remember that the past is a guide not a blueprint. As Roger Hesketh notes in his report on Operation FORTITUDE: “It is always unsafe to apply too literally the experiences of one war to the changed circumstances of another.”³⁶⁵ A good example of a historic technique which may no longer be appropriate is the use of troops to convey disinformation as prisoners. Magruder used troops portraying deserters to convey disinformation to McClellan; this tactic would be rightfully unacceptable today for U.S. planners—though interrogators must still watch for this deception in use by our adversaries.³⁶⁶ Likewise, the use of a corpse as the central prop in Operation MINCEMEAT might have trouble making it through legal review today, or more importantly, the target’s forensic capabilities. And the deliberate use of the press to convey disinformation as was the case with Operation WEDLOCK would surely cause significant blowback today.³⁶⁷ This is not to say that these techniques cannot be adapted for use in the current operational environment; rather, that historic examples of deception must be adapted for usage in the current operating environment, with careful consideration given to the changes since the time the deception was executed.

³⁶⁵ Hesketh, *Fortitude*, 351.

³⁶⁶ The Editors of the Army Times. *The Tangled Web*, 5.

³⁶⁷ Herbig, “American Strategic Deception,” 270 – 271.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

- Acosta, David A. "The Makara of Hizballah: Deception in the 2006 Summer War." Master's thesis, Naval Postgraduate School, 2007. Accessed 9 March 2012. <http://handle.dtic.mil/100.2/ADA469918>.
- Adams, John, Abigail Adams, and Charles Adams. *Familiar Letters of John Adams, and His Wife Abigail Adams during the Revolution. with a Memoir of Mrs. Adams*. New York: Hurd and Houghton, 1876. Google e-book, <http://books.google.com/books?id=fYEEAAAAYAAJ>.
- Allison, Graham and Philip Zelikow. *Essence of Decision: Explaining the Cuban Missile Crisis*. 2nd ed. New York: Addison Wesley Longman, Inc., 1999.
- Anderson, Marie and Emily Zukauskas, eds. *Operational Law Handbook: 2008*. Charlottesville, VA: The Judge Advocate General's Legal Center and School, 2008.
- Baker, Richard. "The Lost and found Art of Deception." Paper presented at the Conference of Army Historians, Arlington, VA, 25 – 28 July 2011.
- Bell, J. Bowyer. "Aspects of the Dragonworld: Covert Communications and the Rebel Ecosystem." *International Journal of Intelligence and Counterintelligence* 3, no. 1 (1989): 15 – 43.
- . "Toward a Theory of Deception." *International Journal of Intelligence and Counterintelligence* 16, no. 2 (2003): 244 – 279. Accessed 8 March 2012. <http://dx.doi.org/10.1080/08850600390198742>.
- Bell, J. Bowyer and Barton Whaley. *Cheating and Deception*. New Brunswick, NJ Transaction Publishers, 1991.
- Bennett, Michael and Edward Waltz. *Counterdeception Principles and Applications for National Security*. Artech House Intelligence and Information Operations Library. Norwood, MA: Artech House, Inc., 2007.
- Boyd, John. "Organic Design for Command and Control," Working Paper, 1987, Accessed 19 February 2012. <http://www.danford.net/boyd/organic.pdf>.
- . "The Strategic Game of ? and ?" Presentation, 1987, Accessed 19 February 2012. <http://www.danford.net/boyd/strategic.pdf>.
- Breitenbach, Daniel. "Operation Desert Deception: Operational Deception in the Ground Campaign." Paper, Naval War College, 1991. Accessed 24 May 2012. <http://handle.dtic.mil/100.2/ADA253245>.

- Center for Army Lessons Learned. *CALL Bulletin 3-88: Deception*. Fort Leavenworth, KS: Combined Arms Training Activity, 1988.
- Chisholm, Roderick M. and Thomas D. Feehan. "The Intent to Deceive." *The Journal of Philosophy* 74, no. 3 (March, 1977): pp. 143 – 159. Accessed 11 January 2012.
<http://www.jstor.org/stable/2025605>.
- Clausewitz, Carl von. *On War*. Translated by Michael Howard and Peter Paret. 3rd ed. New York: Alfred A. Knopf, Inc., 1993.
- Cline, Lawrence. *Pseudo Operations and Counterinsurgency: Lessons from Other Countries*. Carlisle, PA: Strategic Studies Institute, 2005. Accessed 20 April 2011,
<http://www.strategicstudiesinstitute.army.mil/pubs/download.cfm?q=607>.
- Concepts and Force Design Group. *Tactical Cover and Deception: Final Report*. Alexandria, VA: U.S. Army Combat Developments Command, 1972, Accessed 8 August 2011.
<https://www.dtic.mil/DOAC/document?document=ADB966185&collection=ac-tr&contentType=PDF&citationFormat=1f>.
- Coram, Robert. *Boyd: The Fighter Pilot Who Changed the Art of War*. New York, NY: Back Bay Books, 2002.
- Cruikshank, Charles. *Deception in World War II*. London: Book Club Associates, 1979.
- Daniel, Donald C. and Katherine L. Herbig. "Propositions on Military Deception." In *Strategic Military Deception*. Edited by Donald C. Daniel and Katherine L. Herbig, 3 – 30. New York: Pergamon Press, 1982.
- Deception Research Program. *Deception Maxims: Fact and Folklore*. Washington, DC: Office of Research and Development, Central Intelligence Agency, 1980.
- Dempsey, Martin. "America's Military—a Profession of Arms." Washington, DC: Joint Chiefs of Staff, 2012. Accessed 24 February 2012.
http://www.jcs.mil/content/files/2012-02/022312120752_Americas_Military_POA.pdf.
- Dewar, Michael. *The Art of Military Deception in Warfare*. 1st ed. Newton Abbot, UK: David & Charles, 1989.
- Director of Central Intelligence. *Special National Intelligence Estimate, Number 100-2-57: Soviet Capabilities for Deception*. Washington, DC: Central Intelligence Agency, 1957. Accessed 30 January 2012.
http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&res_dat=xri:dnsa&rft_dat=xri:dnsa:article:CSE00201.

- Dunnigan, James F. and Albert A. Nofi. *Victory and Deceit: Dirty Tricks at War*. New York: William Morrow and Company, Inc., 1995.
- Eisenhower, Dwight D. *The Papers of Dwight David Eisenhower: The Chief of Staff*. Edited by Louis Galambos. Vol. VIII. Baltimore: Johns Hopkins Press, 1978.
- Epstein, Edward. *Deception: The Invisible War between the KGB and the CIA*. New York, NY: Random House Value Publishing, 1991.
- Erfurth, Waldemar. *Surprise*. Translated by Stefan T. Possony and Daniel Vilfroy. Harrisburg, PA: Military Service Publishing Company, 1943.
- Ferris, John. "'FORTITUDE' in Context: The Evolution of British Military Deception in Two World Wars, 1914-1945." In *Paradoxes of Strategic Intelligence: Essays in Honor of Michael I. Handel*. Richard K. Betts, and Thomas G. Mahnken, eds. 117 – 165. London: Frank Cass, 2003.
- Funston, Frederick. *Memories of Two Wars*. London: Constable & Co., Limited, 1912.
- Gerwehr, Scott and Russell W. Glenn. *The Art of Darkness: Deception and Urban Operations*. Santa Monica, CA: RAND, 1999. Accessed 16 August 2011.
<http://www.rand.org/publications/MR/MR1132>.
- . *Unweaving the Web: Deception and Adaptation in Future Urban Operations*. Santa Monica, CA: Rand, 2002. Accessed 16 August 2011.
<http://www.rand.org/publications/MR/MR1495/>.
- Gilovich, Thomas. *How We Know What Isn't So*. New York, NY: The Free Press, 1991.
- Godson, Roy and James J. Wirtz. "Strategic Denial and Deception." In *Strategic Denial and Deception: The Twenty-First Century Challenge*. Edited by Roy Godson and James J. Wirtz, 1 – 14. Piscataway, NJ: Transaction Publishers, 2002.
- Goldhamer, Herbert. *Reality and Belief in Military Affairs: A First Draft (June 1977)*. Santa Monica, CA: The Rand Corporation, 1979. Accessed 25 August 2011.
<http://www.rand.org/content/dam/rand/pubs/reports/2005/R2448.pdf>.
- Goldsmith, Robert and Ralph Gerenz. *Techniques for Detecting Cover and Deception*. Billerica, MA: Betac Corporation, 1983. Accessed 16 May 2012,
<http://handle.dtic.mil/100.2/ADP002896>.
- Grabo, Cynthia. *Anticipating Surprise: Analysis for Strategic Warning*. Edited by Jan Goldman. Washington, DC: Center for Strategic Intelligence Research, Joint Military Intelligence College, 2002. Accessed 14 May 2012, www.ni-u.edu/ni_press/pdf/Anticipating_Surprise_Analysis.pdf, 125.

Handel, Michael I. *Masters of War: Classical Strategic Thought*. 3rd rev. and expanded ed. London; Portland, OR: Frank Cass, 2001.

Harris, Stanley G. "Organizational Culture and Individual Sensemaking: A Schema-Based Perspective." *Organization Science* 5, no. 3 (August, 1994): 309 – 321. Accessed 24 February 2012. <http://www.jstor.org/stable/2635133>.

Haswell, Jock. *The Tangled Web: The Art of Tactical and Strategic Deception*. Buckinghamshire, UK: John Goodchild Publishers, 1985.

Headquarters, Department of the Army. *Army Doctrine Publication 3-0: Unified Land Operations*. Washington, DC: Department of the Army, 2011.

———. *Army Doctrine Reference Publication 3-0: Unified Land Operations*. Washington, DC: Department of the Army, 2012.

———. *Army Tactics, Techniques, and Procedures 3-34.39: Camouflage, Concealment, and Decoys/Marine Corps Reference Publication 3-17.6A*. Washington, DC: Department of the Army, 2010.

———. *Field Manual 1: The Army, 2005*. Washington, DC: Department of the Army, 2005.

———. *Field Manual 100-1: The Army*. Washington, DC: Department of the Army, 1994.

———. *Field Manual 100-5: Field Service Regulations—Operations, 1949*. Washington, DC: Department of the Army, 1949.

———. *Field Manual 100-5: Field Service Regulations—Operations, 1954*. Washington, DC: Department of the Army, 1954.

———. *Field Manual 100-5: Field Service Regulations—Operations, 1962*. Washington, DC: Department of the Army, 1962.

———. *Field Manual 100-5: Operations, 1976*. Washington, DC: Department of the Army, 1976.

———. *Field Manual 100-5: Operations, 1982*. Washington, DC: Department of the Army, 1982.

———. *Field Manual 100-5: Operations, 1986*. Washington, DC: Department of the Army, 1986.

- . *Field Manual 100-5: Operations*, 1993. Washington, DC: Department of the Army, 1993.
- . *Field Manual 1-02: Operational Terms and Graphics*. Washington, DC: Department of the Army, 2004.
- . *Field Manual 20-3: Camouflage*, 1993. Washington, DC: Department of the Army, 1990.
- . *Field Manual 20-3: Camouflage, Concealment, and Decoys*, 1999. Washington, DC: Department of the Army, 1999.
- . *Field Manual 3-0: Operations*, 2001. Washington, DC: Department of the Army, 2001.
- . *Field Manual 3-0: Operations, Change 1*. Washington, DC: Department of the Army, 2011.
- . *Field Manual 30-101: Aggressor, the Maneuver Enemy*, 1959. Washington, DC: Department of the Army, 1959.
- . *Field Manual 31-21: Guerrilla Warfare and Special Forces Operations*. Washington, DC: Department of the Army, 1958.
- . *Field Manual 3-13: Information Operations: Doctrine, Tactics, Techniques, and Procedures*. Department of the Army, 2003.
- . *Field Manual 5-20: Camouflage Basic Principles and Field Camouflage*, 1959. Washington, DC: Department of the Army, 1959.
- . *Field Manual 5-20: Camouflage*, 1968. Washington, DC: Department of the Army, 1968.
- . *Field Manual 90-2: Battlefield Deception* 1988. Washington, DC: Department of the Army, 1988.
- . *Field Manual 90-2: Battlefield Deception (HTF)*. Washington, DC: Department of the Army, 1978.
- . *General Orders no. 20*. Alexandria, VA: Department of the Army, 1955. Accessed 28 February 2012. www.armypubs.army.mil/epubs/pdf/go5520.pdf
- . *Training Circular No. 30-1: Tactical Cover and Deception*. Washington, DC: Department of the Army, 1969. Photocopy, University of Texas A&M, College Station, Texas.

- Headquarters, U.S. Military Assistance Command, Vietnam. *Combat Experiences 2-69*. San Francisco: Headquarters, U.S. Military Assistance Command, Vietnam, 1969. Accessed 11 July 2011. <http://handle.dtic.mil/100.2/AD0504303>.
- Headquarters X Corps War Diary Summary for Operation Chromite: 15 August to 30 August 1950. 1950. Accessed 24 January 2012. <http://cgsc.cdmhost.com/utills/getfile/collection/p4013coll11/id/831/filename/832.pdf>.
- Heilbrunn, Otto. *Partisan Warfare*. New York: Frederick A. Praeger, 1962.
- Heiman, Leo. "War in the Middle East: An Israeli Perspective." *Military Review* 47, no. 9 (1967): pp. 56 – 66.
- Henderson, G. F. R., and Garnet Wolseley. *Stonewall Jackson and the American Civil War*. 2 vols. London, New York [etc.]: Longmans, Green and Co., 1936.
- Herbig, Katherine. "American Strategic Deception in the Pacific: 1942-44." In *Strategic and Operational Deception in the Second World War*, edited by Michael Handel, pp. 260 – 300. New York: Routledge, 1987.
- Hesketh, Roger. *Fortitude: The D-Day Deception Campaign*. Woodstock and New York, NY: The Overlook Press, 2000.
- Heuer, Richards J., Jr. *Psychology of Intelligence Analysis*. Reston, VA: Pherson Associates, LLC, 2007.
- Hicinbothom, James, Wayne Zachary, Beverly Knapp, Allen Zaklad, and Alvah Bittner, Jr. *Doing Deception: Attacking the Enemy's Decision Processes*. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, 1990. Accessed 10 March 2012. <http://handle.dtic.mil/100.2/ADA221529>.
- Higginbotham, Benjamin. "On Deceiving Terrorists." Master's thesis, Naval Postgraduate School, 2001. Accessed 4 January 2010. <http://handle.dtic.mil/100.2/ADA401353>.
- Howard, Michael. *British Intelligence in the Second World War: Strategic Deception*. Vol. 5. New York: Cambridge University Press, 1990.
- Jervis, Robert. *Perception and Misperception in International Politics*. Princeton, NJ: Princeton University Press, 1976.

- Johnson, Dominic and Dominic Tierney. "Crossing the Rubicon: The Perils of Committing to a Decision." Cambridge, MA: Belfer Center for Science and International Affairs, Harvard Kennedy School, 2011. Accessed 27 September 2011. <http://belfercenter.ksg.harvard.edu/files/johnson-and-tierney-sep-2011.pdf>.
- Joint Staff. *JP 3-13.4: Military Deception*. Department of Defense, 2006.
- Ketchum, Richard M. *The Winter Soldiers*. 1st ed. Garden City, NY: Doubleday, 1973.
- Kitson, Frank. *Gangs and Counter-gangs*. London: Barry and Rockliff, 1960.
- Kuhn, Thomas. *The Structure of Scientific Revolutions*. 3rd ed. Chicago: University of Chicago Press, 1996.
- Latimer, Jon. *Deception in War*. New York: The Overlook Press, 2001.
- Liddell Hart, Basil. *Sherman: Soldier, Realist, American*. New York: Dodd, Mead, and Company, 1929.
- . *Strategy*. 2d rev ed. New York: Meridian, 1991.
- Lind, William. "The Case for Maneuver Doctrine." In *The Defense Reform Debate*. Edited by Asa Clark, Peter Chiarelli, Jeffrey McKittrick, and James Reed, 88 – 100. Baltimore: The John Hopkins University Press 1984.
- . "Defense Reform: a Reappraisal." In *The Defense Reform Debate*. Edited by Asa Clark, Peter Chiarelli, Jeffrey McKittrick, and James Reed, 327 – 333. Baltimore: The John Hopkins University Press 1984.
- Luttwak, Edward. "Notes on Low-Intensity Warfare." *Parameters* 8, no. 4 (1983): 11 – 18. Accessed 14 July 2011. <http://www.carlisle.army.mil/usawc/Parameters/Articles/1983/1983%20luttwak.pdf>.
- Luttwak, Edward and Steven Canby. *MINDSET: National Styles in Warfare and the Operational Level of Planning, Conduct and Analysis*. Pontiac, MA: C&L Associates, 1980. Accessed 11 March 2012. <http://handle.dtic.mil/100.2/ADA142722>.
- Markus, Hazel. "Self-Schemata and Processing Information about the Self." *Journal of Personality and Social Psychology* 35, no. 2 (1977): 63 – 78. Accessed 24 February 2012. <http://psycnet.apa.org/doi/10.1037/0022-3514.35.2.63>.
- McRaven, William H. *Spec Ops: Case Studies in Special Operations Warfare Theory & Practice*. Novato, CA: Presidio Press, 1995.

- Mure, David. *Master of Deception: Tangled Webs in London and the Middle East*. London: William Kimber & Co. Limited, 1980.
- Nelson, Bradley K. "Battlefield Deception: Abandoned Imperative of the 21st Century." Monograph, U.S. Army Command and General Staff College, 1997. Accessed 2 January 2012. <http://handle.dtic.mil/100.2/ADA339425>.
- The New York Times. "Funston Subject of Sermon." *New York Times (1857-1922)*. April 15, 1901, ProQuest (96118056).
- Noane, Erica. "Hijacking Satellite Navigation." Massachusetts Institute of Technology. Accessed February 25, 2012. <http://www.technologyreview.com/computing/21452/>.
- Office of the Adjutant General. *Lessons Learned, Headquarters, 4th Infantry Division Artillery*. Washington, DC: Department of the Army, 1969. Accessed 22 January 2012. <http://handle.dtic.mil/100.2/AD0505964>.
- Office of the Chief of Army Field Forces. *Strategic and Tactical Cover and Deception Training*. Fort Monroe, VA: Department of the Army, 1948. Photocopy, U.S. Army Military History Institute, Carlisle, PA.
- Official History of the 23rd Headquarters Special Troops*. Photocopy from the National Archives.
- Paddock Jr, Alfred *US Army Special Warfare. Its Origins: Psychological and Unconventional Warfare, 1941-1952*. Washington, DC: National Defense University, 1982. Accessed 16 February 2012. <http://handle.dtic.mil/100.2/ADA118758>.
- Plaster, John. *SOG: The Secret Wars of America's Commandos in Vietnam*. New York: Penguin Group, 1998.
- Plutarch, John Dryden, and Arthur Hugh Clough. *Plutarch's Lives*. Modern Library paperback ed. Vol. 1. New York: Modern Library, 2001.
- Prados, John. *Presidents' Secret Wars*. Revised and updated ed. Chicago: Elephant Paperbacks, 1996.
- Random House Webster's Unabridged Dictionary*. New York: Random House Reference, 2001.
- Reese, William. "Deception within a Communications Theory Framework." In *Strategic Military Deception*, edited by Donald C. Daniel and Katherine L. Herbig, 99 – 114. Elmsford, NY: Pergamon Press Inc, 1982.

- Schwarzkopf, H. Norman. "Central Command Briefing." *Military Review* 71, no. 9 (September 1991): 96 – 108.
- Sherman, William. *Memoirs of General William T. Sherman*. Vol 2. 2nd ed. New York: D Appleton and Company, 1904.
- Shulsky, Abram. "Elements of Strategic Denial and Deception." In *Strategic Denial and Deception: The Twenty-First Century Challenge*. Edited by Roy Godson and James J. Wirtz, 15 – 39. Piscataway, NJ: Transaction Publishers, 2002.
- Shultz, Richard H. *The Secret War Against Hanoi: Kennedy and Johnson's Use of Spies, Saboteurs, and Covert Warriors in North Vietnam*. New York: HarperCollins, 1999.
- Special Assistant for Counterinsurgency and Special Affairs (SACSA). *Draft MACSOG Documentation Study Annex A to Appendix C Psychological Operations*. Washington, DC: Joint Chiefs of Staff, 1970. Accessed 2 September 2011.
http://www.dod.gov/pubs/foi/International_security_affairs/vietnam_and_southeast_asiaDocuments/520-1.pdf.
- . *Draft MACSOG Documentation Study Appendix A Summary of MACSOG Documentation Study*. Washington, DC: Joint Chiefs of Staff, 1970. Accessed 2 September 2011.
http://www.dod.gov/pubs/foi/International_security_affairs/vietnam_and_southeast_asiaDocuments/520-22.pdf.
- . *Draft MACSOG Documentation Study Appendix H Security, Cover & Deception*. Washington, DC: Joint Chiefs of Staff, 1970. Accessed 2 September 2011.
http://www.dod.gov/pubs/foi/International_security_affairs/vietnam_and_southeast_asiaDocuments/520-18.pdf.
- Team "B". *Soviet Strategic Objectives: An Alternative View*. Washington, DC: Director of Central Intelligence, 1976. Accessed 16 April 2012.
http://www.foia.cia.gov/docs/DOC_0000278531/DOC_0000278531.pdf.
- The Editors of the Army Times. *The Tangled Web: True Stories of Deception in Modern Warfare*. Washington, DC: R. B. Luce, 1963.
- Tse-tung, Mao. "On the Protracted War " In *Selected Works of Mao Tse-Tung*. Vol. 2, 113 – 194. Peking: Foreign Language Press, 1965.
- Tversky, Amos and Daniel Kahneman. "Belief in the Law of Small Numbers." *Psychology Bulletin* 76, no. 2 (1971): 105 – 110. Accessed 25 February 2012.
http://pirate.shu.edu/~hovancjo/exp_read/tversky.htm

- U.S. Army Command and General Staff College. *Reference Book 31-40: Techniques for Deception*. Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1976.
- U.S. Department of the Army. General Staff, G-3. "Combat Deception." 1954. Photocopy from U.S. Army Military History Institute, Carlisle, PA.
- Von Greiffenberg, Hans. *Deception and Cover Plans Project #29*. Edited by Harald Kehm. Translated by J. B. Robinson (Koenigstein, Germany: Foreign Military Studies Branch, 1950), 80.
- War Department. *Field Manual 100-5: Tentative Field Service Regulations of Operations, 1939*. Washington, DC: Government Printing Office, 1939.
- . *Field Manual 21-45: Basic Field Manual of Protective Measures, Individuals and Small Units*. Washington, DC: Government Printing Office, 1942.
- . *Field Manual 5-20: Camouflage Basic Principles, 1944*. Washington, DC: War Department, 1944.
- . *Field Manual 5-20: Engineer Field Manual of Camouflage, 1940*. Washington, DC: War Department, 1940.
- . *Field Service Regulations of Operations, 1941*. Washington, DC: Government Printing Office, 1941.
- . *Field Service Regulations, United States Army. 1905, with Amendments to 1908*. Washington, DC: Government Printing Office, 1908.
- . *Field Service Regulations, United States Army. 1910*. Washington, DC: Government Printing Office, 1910.
- . *Field Service Regulations, United States Army. 1914*. New York, NY: Government Printing Office, 1914.
- . *Field Service Regulations, United States Army. 1923*. Washington, DC: Government Printing Office, 1924.
- The Washington Post. "Gen. Funston's Action." *The Washington Post (1877-1922)*, March 28, 1902, ProQuest (144350948).
- Wass de Czege, Huba. "Army Doctrinal Reform." In *The Defense Reform Debate*, edited by Asa Clark, Peter Chiarelli, Jeffrey McKittrick, and James Reed, 101 – 120. Baltimore: The John Hopkins University Press 1984.

- Weigley, Russell Frank. *The American Way of War: A History of United States Military Strategy and Policy*. Indiana University Press paperback ed. Bloomington, IN: University Press, 1977.
- Wells, Leonard. "Military Deception: Equivalent to Intelligence, Maneuver and Fires." Paper, Navy War College, 2008. Accessed 20 May 2012. <http://handle.dtic.mil/100.2/ADA494225>.
- Weyth, John. *Life of Lieutenant-General Nathan Bedford Forrest*. New York and London: Harper and Brothers Publishers, 1905.
- Whaley, Barton. "The One Percent Solution." In *Information Strategy: A Guide to Theory and Practice*. Edited by John Arquilla and Douglas Borer, 127 – 159. New York and London: Routledge, 2007.
- . *Stratagem: Deception and Surprise in War*. Cambridge, MA: Center for International Studies Massachusetts Institute of Technology 1969. Accessed 16 February 2012. <http://www.vietnam.ttu.edu/virtualarchive/items.php?item=2171516001>.
- . *Stratagem: Deception and Surprise in War*. Norwood, MA: Artech House, 2007.
- Wohlstetter, Roberta. *Pearl Harbor: Warning and Decision*. Stanford, CA: Stanford University Press, 1962.
- Wolseley, Garnet. *The Soldier's Pocket-book for Field Service*. 2nd ed. London and New York: MacMillan and Co., 1871.
- Womack, George. "Operational Deception and the Principles of War." Paper, Naval War College, 1994. Accessed 20 May 2012. <http://handle.dtic.mil/100.2/ADA279632>.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Joint Special Operations University
Hurlburt Field, Florida
4. HQ 4th MISOC
Ft. Bragg, North Carolina
5. HQ 5th Battalion, USAJFKSWCS
Ft. Bragg, North Carolina
6. Marine Corps Information Operations Center
Quantico, Virginia
7. Asymmetric Warfare Group
Fort Meade, Maryland
8. SOCCENT J5-IO
Tampa, Florida
9. SOCOM, J39
MacDill Air Force Base, Florida